AN ESSAY ON THE MANAGEMENT AND NURSING OF CHILDREN IN THE EARLIER PERIODS OF INFANCY:

AND ON THE TREATMENT AND RULE OF CONDUCT REQUISITE FOR THE MOTHER DURING PREGNANCY, AND IN LYING-IN.

INCLUDING THE DISEASES TO WHICH THE MOTHER AND CHILD ARE LIABLE;

WITH THE METHODS OF CURING, AND PARTICULARLY OF PREVENTING MANY OF, THOSE DISEASES.

The whole addreſſed, as well, to the MEDICAL FACULTY, as to the PUBLIC AT LARGE; and purpoſely adapted to a FEMALE comprehenſion, in a manner perfectly conſiſtent with the delicacy of the SEX.

By WILLIAM MOSS, SURGEON.

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TO THE

QUEEN.

MADAM,

THAT unreſerved and impartial diſpenſation of a native benevolence, which ſo juſtly and eminently diſtinguiſhes your Majeſty; added to a ſympathetic tenderneſs, manifeſted by your Majeſty upon all occaſions, in the cauſe of your ſex and their tender offſpring in the ſituations here treated of; encourage me to ſolicit, for this eſſay to leſſen and alleviate the ſufferings ſuſtained by the mother and infant, a refuge in, that foſtering aſylum, your royal protection.

Your Majesty's solicitous attention to the maternal duties of your own royal family, has long obtained the grateful acknowledgments of an admiring public; and has been the happy means of inducing general emulation:—duties, that, although fraught with powerful, intrinsic allurements, become yet more captivating under the influence of so bright an example.

That your Majesty may long continue the patroness of every private and public virtue, is the zealous wish of,

MADAM,

Your Majesty's most dutiful,

most humble Servant,

LIVERPOOL,
September 29, 1781. WILLIAM MOSS.

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ERRATA.

Page 60, line 22, *for* vegitable *read* vegetable.
77, 11 of the note, *for* the ſtools *read* their ſtools: *and for* their appearance *read* the appearance.
100, 10, *for* ſtricty *read* ſtrictly.
206, 14 of the note, inſtead of ! put ?.
275, 4 of the note, *for* ſymptomatic *read* ſympathetic.
365, 1 of the note, *omit* to.

PREFACE.

IMPROVEMENTS in Medicine have of late been more conſiderable and frequent than formerly; which is to be attributed to the more than uſual freedom with which reſearches are proſecuted, and diſcoveries communicated, by its profeſſors, in almoſt every department.

The ſubjects upon which we are about to enter have not been altogether diſregarded; yet they have had a leſs ſhare of attention beſtowed upon them, and have not been ſo minutely inveſtigated as moſt of the others; nor have the diſcoveries, made therein, been improved upon and ſo generally applied to practice.

In inquiring into the occaſion of this omiſſion, it will appear, that they have always been conſidered as ſituations that neceſſarily fall within the

ſphere of domeſtic control and ſuperintendency; and cuſtom, that grand arbiter from whoſe deciſion an appeal is ſeldom ſolicited, ſeldomer obtained, continues to enforce the opinion, and to preclude all other aids, except upon urgent occaſions. The nurſing of infants, and lying-in women, no doubt comes within this limitation, ſo far as concerns the executive part; but it does not follow, from thence, that the direction of it is to be conſidered in the ſame light. It is an opinion, very generally adopted, that the care and direction of women and children upon theſe occaſions is moſt properly ſubmitted to the management of nurſes; who from their conſtant practice and experience are ſuppoſed ſufficiently qualified to direct it; and that it is a province in which they ought not to be controlled. Theſe arguments, which have originated in ignorance and ſuperſtition, are ſupported upon no other or better ground than prejudice; as daily experience proves their fallacy. I have no doubt in declaring that numerous diſadvantages and even miſchiefs attend a compliance with the cuſtoms and ordinary forms of proceeding upon theſe occaſions; and am well ſatisfied of the many and conſiderable benefits that will be obtained by an alteration and reviſal of the practice, in a great many inſtances.

THE *Medical Faculty* have for ſome time paſt been convinced of the neceſſity of a reform; and a few of the moſt groſs and injurious cuſtoms and prejudices, particularly in the treatment of lying-in women, have been removed by their endeavours, as well privately in practice, as by publications: but, as prejudices, of ſo remote origin and long eſtabliſhment, give way very ſlowly, and with but a few individuals, to private admonition; and as the public, from the ſtyle in which the faculty addreſs each other, unintelligible to all but themſelves, cannot be inſtructed by ſuch publications; improvement has ſucceeded by ſlow and partial advances; and unleſs ſome methods, different from what have been attempted, are hit upon, may continue in the ſame lingering and imperfect ſtate. Theſe conſiderations have induced me to adopt this mode, as beſt calculated for conveying every neceſſary information upon the preſent ſubjects. I am well aware how arduous the taſk is, and of the many difficulties that are to be encountered, in oppoſing long eſtabliſhed cuſtoms, and in combating common prejudices; yet theſe obſtacles, however formidable, are not powerful enough to deter me from a purſuit ſo extremely eſſential to the welfare, happineſs, and general intereſts of ſociety: relying upon the prevalence which a knowledge deduced and de-

livered from facts and experience will, with the ſenſible and intelligent part of mankind, obtain over that which is founded upon and ſupported by general uſage, cuſtom, or opinion, of whatever authority, date, or origin they may be.

These ſubjects are, by many, conſidered as trifling, and not ſufficiently important for the attention of any but old women and nurſes; and, by others, as incapable of farther improvement; conſequently, unworthy of ſerious inveſtigation. But theſe are the arguments of uninformed and ſuperficial obſervers only; for, upon a judicious examination, they will be found to be fair, open, and ſuitable fields of inquiry; of much importance; that have lain ſomewhat neglected; and which will admit of a much higher degree of cultivation. It is generally ſuppoſed that children have many complaints that cannot be diſcovered, or, if they are, that they cannot be relieved.—The admiſſion of this opinion, which is very erroneous and ill-founded, is the cauſe of the daily loſs of numbers, who, by it, are conſigned to oblivion without an effort for their reſcue. No doubt, the life of an infant is very precarious, and is cut ſhort by a *trifle*: it therefore becomes highly neceſſary, if we wiſh to preſerve it, to attend to *trifles*; and if we can by ſuch attention be enabled but now and then to ſave a life, that

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muſt otherwiſe be reſigned to inevitable deſtruction, or, at beſt, to chance, it is certainly worth the exertion of every endeavour in the attempt. There are alſo many ſituations that call for aſſiſtance where the life is not in immediate danger; for we are too commonly preſented with caſes of deformity and ſickly conſtitutions at advanced periods of life, the foundations of which have been laid in infancy by the neglect or miſmanagement of nurſes, or others to whoſe care infants are committed; or even by the miſtaken zeal and indulgences of fond parents, whoſe attentions and aſſiduities will ſometimes produce the very evils they were intended to prevent, and that, for want of being properly directed and informed. There is not a doubt that conſtitutions, if not altogether formed, are yet materially modelled, in infancy; and that our future health depends very much upon the manner in which our infancy is conducted. This obſervation alſo holds good throughout the animal creation.

THE *mother*'s life, during her lying-in, is often in danger, and ſometimes actually loſt, by her being compelled to ſubmit to and go through the many rules and ceremonies that are thought indiſpenſable upon ſuch an occaſion, many of which are not leſs diſagreeable than injurious, and by which the conſtitution is *always* weakened

and impaired, *oftentimes* very materially.—Whoever ſaw his hopes and promiſed bleſſing defeated in the puny, ſickly conſtitution, or the entire loſs, of his child; and was told that *it is common to children*, that *little or nothing can be done for them*, and that therefore *it muſt be ſubmitted to?*—Whoever beholds the health, bloom, and vivacity of the ſharer and ſupporter of his happineſs decline in a ſituation from which every comfort and ſatisfaction may be expected to ariſe; and is told that every thing *has* been done, and *muſt* be done, conformable to the cuſtom upon ſuch an occaſion?—Who, in either or both of theſe ſituations, would not wiſh any opinion and ceremony, how ſtrongly ſoever ſanctioned by cuſtom, diſpenſed with to avoid conſequences ſo diſtreſſing; and readily ſubſcribe to the introduction of others that, from reaſon and experience, promiſe, and, in many caſes, enſure, better ſucceſs?

The taſk I have undertaken is to expoſe a number of the moſt groſs abſurdities that commonly prevail in the management and nurſing of lying-in women and children, and to point out ſuch methods, rules, and directions as have by experience been found more ſalutary, advantageous, and, at the ſame time, more deſirable, eaſy and pleaſing. Truth here impels me to declare a cauſe which regularly preſents itſelf as

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an obſtacle to improvement; and that is, the entire direction which nurſes aſſume in whatever concerns the management of lying-in women and children: for they are ſo jealous and tenacious of what they ſuppoſe their authority upon theſe occaſions, as ſeldom to ſuffer themſelves to be directed or adviſed; any advice, therefore given them, they conſider as a reflection upon their judgment, and, in vindication of which, they as commonly reject it. By ſuch conduct, the avenues to improvement are nearly ſhut; and the ſame formal, baneful rules and cuſtoms are ſtrictly and invariably handed down to ſucceſſive generations. It is not without reluctance that I reflect upon ſo uſeful a body as the nurſes; but the certainty and magnitude of the evil muſt be my apology. If, in attempts to detect and reform common errors and abuſes, they are in part overlooked, concealed, or palliated; any good purpoſes, that may be intended by promulgation, muſt be conſiderably leſſened; frequently altogether defeated. So if, in theſe and the ſtrictures which hereafter follow, the cenſures ſeem rather ſtrict, I hope it will be imputed to no other motive than, the real one, my duty as a faithful hiſtorian, to draw an exact repreſentation of objects as they appear, without embelliſhment, or extenuation. To avoid the appearance of ſingularity, and to juſtify the

propriety of the method and remark, I need no other precedent than the reſpectable authority of Mr. White; who, in ſpeaking of the errors in the management and nurſing of lying-in women, in large towns, London eſpecially, being ſomewhat "ſtrange," conſidering there is the beſt advice and aſſiſtance to be had, ſays: "But our wonder "will ceaſe when we reflect that not only the "general cauſes in large populous towns will "operate, but likewiſe that the articles of air, "diet, dreſs, &c. are left to the management of "nurſes in that city," (London) "who claim it "as a kind of prerogative, and it is next to ſacri-"lege to encroach upon their privileges. Whe-"ther this circumſtance has been conſidered in "that important light it deſerves, or whether the "ſucceſs of a reformation has been deſpaired of, "I will not pretend to determine. The nurſes "in London are a numerous and powerful body, "and an attempt to reform their ancient cuſtoms "might be looked upon as an open attack upon "them, a violation of their rights, and an actual "declaration of war. A young man juſt coming "into buſineſs might juſtly think it too daring "an attempt to encounter them; he would in all "probability be unequal to the taſk, and his "future progreſs would be ſtopt, by making ſuch "powerful enemies. The man in full and eſta-

"bliſhed

"bliſhed buſineſs could not perhaps ſpare ſo "much time as would be neceſſary, for it would "require a very frequent and conſtant attendance "upon his patients to ſee that the nurſes did their "duty; and by ſuch an attempt he might loſe "much, and gain little, except trouble and "oppoſition." *A Treatiſe on the Management of Pregnant and Lying-in Women*, p. 157.

Mr. White has there exactly and truly ſtated the caſe: and although, as he obſerves, theſe errors prevail moſt in London, yet other large towns, and even villages, are far from being exempt from them. His ſubject confines him entirely to pregnant and lying-in women, therefore he has not an opportunity of noticing the fatal conſequences of improper treatment in the nurſing of children, which in ſome meaſure proceeds from the ſame cauſe. His arguments tend to prove the difficulty of a reformation by the methods hitherto practiſed, and appear to confirm the eligibility of this.

The *Firſt Part*, which relates to the nurſing and diſeaſes of children in the infant ſtate, is deſigned for the peruſal and attention of thoſe who nurſe or ſuperintend the nurſing of children; being diſpoſed in a method and ſtyle ſuited to general comprehenſion, and diveſted of technical, obſcure terms as much as poſſible; ſuch as inevitably

occur

occur are explained; whereby they may not be at a loſs, or afraid to judge, or even act, upon many occaſions, where proper medical advice either cannot be obtained, or may not be thought neceſſary, with a degree of freedom and ſafety under moſt difficulties that may occur; and be directed to ſhun and avoid the errors and miſtakes which muſt often attend a want of experience and knowledge in themſelves, or too cloſe a compliance with, or implicit confidence in others, by whom, through a blind miſtaken zeal and attachment to common forms and vulgar prejudices, they may be deceived and miſled.

It has been generally ſuppoſed (as already obſerved) that children do not ſtand in need of medicine or medical advice. No doubt, children at this period do not require a large quantity, or great variety of medicines in the diſeaſes to which they are liable; yet, that by no means implies that medicine is to be entirely rejected, and that, properly adminiſtered, it may not have its uſes; which it certainly has: however, many other circumſtances relating to infants require a nice and exact attention and judicious regulation; as, the Diet, Cloathing, Air, Exercise, &c. &c. all which are immediately eſſential to their health; and without which it cannot be preſerved or acquired, or reſtored when loſt or impaired.

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THE *Second Part*, which relates to Pregnant and Lying-in Women, is, in ſome meaſure, neceſſarily connected with the former; and the intention of it is conducted upon the ſame domeſtic principle. But although, from the nature and delicacy of the ſubject, it will not admit of ſo ample and extenſive a diſcuſſion as the other; yet, it is hoped, ſome rules and obſervations are there inſerted which may be attended to with propriety and advantage.

As a performance of this kind muſt be very unpleaſing, and even diſguſting, without a proper regard to delicacy in the execution of it; ſo the ſtricteſt attention has been paid to it through the whole of *this*, that a mind, ſuſceptible of the moſt delicate ſenſations, cannot, it is hoped, be offended.

MEDICAL ſubjects are, of all others, the moſt improper to be ſubmitted to general inſpection and peruſal, from the difficulty, and almoſt impoſſibility of making them properly and ſufficiently intelligible to thoſe who have not made medicine a diſtinct, particular ſtudy; on which account, medical books and receipts, except in the hands of medical men properly ſo called, will be, and are, moſt commonly miſapplied, and, of courſe, become unſafe, and even dangerous.

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THE Sciences, in general, are founded upon a ſeries or chain of rules and precepts, ſo connected and invariable, as to render the application of them demonſtrable, frequently, to the niceſt certainty; as appears in aſtronomy; where the motion of many of the heavenly bodies is preciſely aſcertained; in natural philoſophy, where the laws of nature are found to be uniform and regular; &c. &c. The laws of the human body, in a diſeaſed ſtate, are however an exception to, and will not admit of ſuch fixed bounds and regulations. For although medicine, as a ſcience, requires a ſtudy ſomewhat regularly progreſſive through its different branches and departments, with a deſign of forming a baſis and ſtated rules for general practice; yet notwithſtanding all the endeavours and attempts that have been made with that view, very few ſuch general rules have been obtained to direct the practice of it, as can be invariably adopted, and which do not neceſſarily admit of many and very frequent objections and alterations.

MANY of the laws of animated nature, in a ſound, healthy, and perfect ſtate, are very regular, and nearly reducible to a ſyſtematic order; as, the laws of viſion, or ſight; hearing; and the other ſenſes; as alſo are moſt of the proceſſes and operations of the human body, as the food; ſleeping; waking;

waking; &c. &c. yet when, from a defect in one or more of the organs or conſtituent parts of the machine, a diſeaſe is produced, that uniform, regular order is interrupted; and ſo variable, uncertain, and irregular are the changes thus produced, as to exclude the moſt diſtant hope of ever obtaining or eſtabliſhing a *regular* ſyſtem of practical medicine: perhaps we recede and are farther from it than ever we were; as diſeaſes become more variable and aggravated, and even new ones formed, by luxury and indulgences of every kind, which have increaſed much of late years in many parts of the kingdom; and there is but little proſpect of a decline of them. The diſeaſes to which the human body is liable by nature, are comparatively very few in number with thoſe that are produced by art, or luxuries and exceſſes; and are much more ſimple in themſelves, as are likewiſe the means which are to be uſed in obviating and removing them.

If Medicine, like the other ſciences above alluded to, could be ſo far reduced to a ſyſtem, that general rules could be univerſally adopted, very moderate abilities and trifling application would be ſufficient to conduct the practice of it. This however is found by experience not to be the caſe; as a diſeaſe, apparently the ſame in two different perſons, or in the ſame perſon at diffe-

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rent periods, will frequently require a different treatment, often quite oppoſite, depending upon, a difference or change in the conſtitution, climate, ſeaſon of the year, period of life, the exciting cauſe, or other circumſtances ſo numerous and variable as ſcarcely to admit of deſcription: ſo that it very often happens, that what is found to give relief upon one occaſion, and at one time, may not only be ineffectual, but even injurious at another. To conceive and form theſe nice diſtinctions properly, requires the exertion of a judgment informed and corrected by much ſtudy and experience—the only guides and directors to be ſafely truſted.

From the above conſiderations, the obvious difficulty of practiſing by any given or general rules, howſoever ſeemingly clear and explicit they may be, is very apparent, without firſt obtaining ſuch a general knowledge of the animal œconomy, the nature of diſeaſes, and the powers and particular application of medicines, as to be enabled to vary the practice as circumſtances and exigences ſhall indicate and require.

These arguments are here introduced with a view of pointing out the inefficacy and dangerous tendency of medicine as it is commonly practiſed and applied in a domeſtic or family way, either from medical books and receipts, or by means of medicines

medicines recommended by friends or acquaintance upon their own authority, or the faith and confidence they repoſe in a newſpaper advertiſement. It is not however here intended to condemn any book of medicine, or medicines otherwiſe preſcribed or compounded, as in themſelves uſeleſs, or dangerous, upon all occaſions: no doubt ſuch a judicious choice may be made of them, as to render them convenient and uſeful, when properly applied; but it is the uncertainty and difficulty of ſuch choice and application that is here alluded to, and to which the public ſhould ſo warily and cautiouſly attend.

It is a common obſervation with reſpect to many medicines in general uſe, that they are ſo ſafe and innocent they can do no harm. This may be applied to a very few; but upon the whole, the argument is very deceitful; as, a medicine, that can do good, is alſo capable of doing harm; for, to anſwer any purpoſe, it muſt produce a change and alteration in the body; if it be properly applied, the change will be favourable; if improperly, the reverſe. Medicines therefore are weapons that ſhould not be wantonly or incautiouſly ſported with. It is alſo well known, that medicines, when the moſt judiciouſly applied, loſe their effect by too long and frequent repetition, which

ſhould

ſhould be a caution againſt the too common uſe of ſuch as are even found to be the moſt efficacious.

Receipts and books of *medicine* therefore become dangerous inſtruments in the hands of thoſe who have not made medicine a regular, diſtinct ſtudy, from the riſque and danger of miſapplication. This obſervation is moſt particularly applicable to books which are purpoſely deſigned for the faculty alone: for let a man's underſtanding be ever ſo exalted, in other reſpects, he cannot read them with any advantage to himſelf or his friends, as he will be ſubject to form erroneous concluſions from, what to him may appear, the moſt ſimple and familiar poſitions; and he will be as liable to be deceived by ſpecious argument, as another man greatly his inferior in general underſtanding.

The books that are intended for domeſtic or family uſe are not always ſo unexceptionable as might be wiſhed, being commonly too diffuſe, and not ſufficiently explicit: whereby they become liable to the ſame exceptions with thoſe juſt mentioned. The accounts of diſeaſes, and the remedies to be applied, when addreſſed to the public, ought to be conciſe, diſtinct, and plain; and the greateſt care and attention ſhould be paid, not to enter, or proceed upon, any ſubject, beyond what the capacity of a perſon entirely unacquainted with medicine

medicine can readily and juſtly comprehend, and which he can ſcarcely miſconceive. For which reaſon, thoſe ſubjects, or diſeaſes, which are in their nature difficult, or intricate, and are liable to great and frequent varieties and changes in their different ſtages and appearances, ſhould be either totally omitted, or very ſparingly and cautiouſly touched upon; otherwiſe, from perhaps a ſlight miſtake in the nature of the complaint, and the conſequent miſapplication of remedies, independent of the conſequences of delay, the diſeaſe may be increaſed and aggravated, or another may be produced which would not have happened or exiſted had nature been ſuffered to take her own courſe, or been timely or properly aſſiſted by a judicious practitioner.

Fevers, and feveriſh complaints, are among the number of thoſe which are difficult to diſtinguiſh and fix to ſtated rules, periods, and forms; as a ſingle caſe of fever may aſſume, and run through, all the different changes and varieties of fevers; or, may put on all, or moſt, of the appearances of different fevers at the ſame time, ſo as to make it difficult to determine which is moſt predominant; and this is not ſo unuſual as may be ſuppoſed. The difficulty therefore of applying general rules to

practice in fevers, will be obviouſly apparent. Many more diſeaſes are liable to the ſame ſtrictures with the foregoing; but an enumeration and deſcription of them all would be tedious and a deviation from the preſent deſign: ſuffice it therefore farther to obſerve upon this ſubject; that nervous and hypochondriac affections, as being diſeaſes in which the mind bears a principal ſhare, and is materially affected, are, of all other ſubjects, the moſt exceptionable, and unfit for the inſpection of thoſe who unfortunately happen to labour under them.—There is, attending theſe complaints, a degree of reſtleſs inquiſitiveneſs and anxious ſolicitude, perpetually prompting thoſe who are afflicted with them to a ſearch after every means which, they ſuppoſe, may direct them to an explanation of their complaints. And although this is a gratification which they purſue and embrace with great eagerneſs and avidity; yet it generally proves deluſive: and they are moſt commonly ſeduced and led by it into ſuch intricate and inexplicable labyrinths of imaginary evils and conceits, as ſerve to perplex and bewilder them, and to add to, confirm, and ſtrengthen the diſeaſe, rather than remove, or even palliate any ſymptom of it: and which is not to be

be wondered at, when it is conſidered, that the mind, in this ſituation, is ſo agitated, diſcompoſed, or diſordered, as to be rendered unfit and unable to decide with that calmneſs, clearneſs, and candour, ſo neceſſary to its comfort and relief. The mind when undiſturbed and in a ſtate of health and perfect compoſure, is liable to be impoſed upon by many things which are ſuffered to make a ſtrong impreſſion upon It, where It encourages, rather than checks or avoids the firſt impulſe and impreſſion; and which It is ſubject to do, often out of curioſity, depending upon Its own ſtrength and exertion to reſcue It from any unfavourable impreſſions; yet, in many caſes, this is not very readily effected; and eſpecially in the inſtances before us; wherein an appeal may be made to the feelings of thoſe who have attentively peruſed medical authors, if they have not fancied themſelves to have many of the ſymptoms and complaints which they read about, and that to ſuch a degree, as, ſometimes, to give them ſome uneaſineſs; and yet at the ſame time they are in perfect health, and find themſelves ſo, when they have been able to baniſh thoſe alarming ideas, which the imagination, influenced and directed by fear alone, had dictated; but which, ſometimes, is not eaſily

accompliſhed; as, nothing makes a more forcible and laſting impreſſion upon the human mind, than the dread of bodily pain and diſeaſe, with their attendant conſequences. If, therefore, diſagreeable impreſſions are produced by ſuch means, in a ſtate of health; it will be no difficult matter to conceive how much they muſt be increaſed and aggravated in a ſickly ſtate, when the ſpirits are moſt commonly materially affected, and, of courſe, become more ſuſceptible of, and readily depreſſed by, unfavourable impreſſions.

THE ſubjects which compoſe the following *Eſſay* may be ranked with thoſe that are moſt properly ſuited to domeſtic practice; as the diſeaſes and affections to which young children and lying-in women are naturally liable, are more regular, uniform, and leſs variable in their appearances and events, than thoſe at other periods, and upon other occaſions: and this is readily accounted for, by conſidering; that in the infant ſtate, the refinements and luxuries of life can ſeldom operate upon the conſtitution, to ſuch a degree, as to produce a diverſity of complicated, or unnatural or artificial complaints as they may juſtly be termed; (page 19) conſequently the diſeaſes, and the

the neceſſary treatment of them, will, and are always found to be, more regular, uniform, and ſimple or plain in infancy, than at any other period of life. With reſpect to pregnancy and lying-in; they are to be conſidered as the moſt regular and familiar proceſſes and efforts of nature, rather than as complicated diſeaſes; and, of courſe, the rules to be obſerved in conducting them, will, or ought to be, almoſt invariably the ſame, in a natural or healthy ſtate; and when, from any cauſe, this regularity is broken in upon, or interrupted; ſo powerfully, uniformly, and ſpeedily do the laws of nature operate and aſſiſt in recovering their wonted ſtandard and equilibrium, that the means for obtaining it are nearly ſimilar and reducible, upon all occaſions, to a regular and ſyſtematic form and order; as will appear in the ſequel.

It is ſcarcely neceſſary to obſerve, that thoſe bad effects upon the mind which, as has been obſerved, are produced by the reading or ſtudy of medical authors, cannot, with children, take place in *any* degree: and, from the plan or method which is here adopted, it is hoped it will be in the ſlighteſt degree, or not ſo at all, in the parts which follow.

WITH a reliance upon the propriety of the method, and a confidence in the general utility of the ſubject, they are ſubmitted to the public, to be extended and improved upon (with a conſciouſneſs, ariſing in ſome degree from their novelty, that they will greatly admit of both) by thoſe who have leiſure and abilities, as may appear neceſſary.—No ſubject can be more intereſting to mankind, than that, wherein the health of the moſt amiable part of the creation, and that of their lovely offſpring, is eſpecially concerned: they being the ſources from whence we derive the moſt exalted and refined happineſs; and unitedly form one of the greateſt comforts and bleſſings in the very limited catalogue of human enjoyments; —namely;—DOMESTIC FELICITY!

LIVERPOOL, *April* 1, 1781.

TO THE

MEDICAL READER.

PRIOR to any intention of publiſhing upon the following ſubjects, I had drawn up a *few* directions for a ſelect part, which (when completed) I propoſed diſtributing in manuſcript to my own patients, for their information: but upon reflecting that the ſcale would be very confined, and attended with much trouble in the execution, I declined it, and adopted this mode; the propriety of which I ſubmit to the candour of the FACULTY, of thoſe eſpecially under whoſe department the neceſſary attendances upon theſe occaſions more particularly fall; and who muſt be too fully ſenſible, from experience, that however familiar, and not withſtanding the improvements that have been made upon, the ſubjects here treated of, they have ſtill too much of the ruſt and leaven

of ſuperſtition, and the prejudices of cuſtom, about them, to be removed effectually, in ſo great a variety of inſtances, by mere *verbal* directions, occaſionally given, and which are frequently forgot, wilfully neglected, or deſpiſed and over-ruled by nurſes and various officious adviſers. This leads me to diſcloſe an intention I have in this publication; which is: that, from the cauſes here aſſigned; and from the cloſe attention neceſſary in ſo great a variety of occurring inſtances; often too numerous, from other profeſſional engagements, to be properly and ſtrictly attended to by the faculty; it may in its domeſtic application, upon many occaſions, become a ſeaſonable relief to themſelves: and if I can be favoured with their countenance and concurrence in the direction of it in that line, I am ſenſible its uſe will, by their judicious interpoſition, be eſſentially promoted and extended.

As, in dry nurſing, an error in the diet becomes the ſource of much miſchief, an attention to it is an object of great importance. I have therefore been very particular upon that ſubject, eſpecially as it is a matter that has not hitherto been conſidered with that attention it appears to deſerve; and having great reaſon to ſuppoſe the regulations and method I have offered

fered are ſuch as are not commonly known or practiſed, and, particularly, ſuch as have not been publiſhed. In applying theſe regulations to practice, I have had ſufficient experience to confirm me in the certainty of their being much preferable to the methods in common uſe; which, with their novelty, will, I truſt, juſtify the manner in which I have introduced and offered them. I hope I ſhall ſtand acquitted of prolixity throughout the whole, as it is what I have endeavoured to avoid. The expediency of full deſcriptions and explanations, upon this plan, is too obvious to need an apology.

ON THE

MANAGEMENT, &c.

OF

NEW-BORN CHILDREN.

VARIOUS, as the climates which they inhabit, are the cuſtoms of the ſeveral inhabitants in the ceremonies, dreſs, and management of their young children; ſome of which are conſiſtent with, and properly adapted to, the reſpective climates and other natural and occaſional contingences; and others depend altogether upon the cuſtoms and manner of the inhabitants, many of which are as inconſiſtent and prepoſterous in their manner as they are obſcure in their date and origin. Superſtition and error being the offspring of ignorance, they are commonly found attached and proportioned to each other, and muſt prevail in the uncivilized and unenlightened countries of the

the world, whoſe inhabitants are entirely, or chiefly, governed and directed by cuſtom and prejudice; their own uncultivated reaſon being a ſource from whence they can procure very little aſſiſtance, and which they ſeldom have recourſe to.—As the manners and ſentiments of mankind become enlarged and refined by unlimited intercourſe, and an emulous exertion in the purſuit of knowledge, the deluſive ſhadows of ignorance diſappear, and are ſupplanted by a knowledge erected upon the more immutable and permanent baſis of rational conſiſtence, and palpable conviction: hence we find, that fewer of the groſs abſurdities of the uninformed, uncivilized countries prevail in this: yet, as knowledge, of every kind, muſt be acquired, and is not a natural gift, (whatever the capacity for obtaining it may be) we muſt expect, now and then, to meet with thoſe, who, from a want of opportunity of being properly informed, have been early attached, and continue prejudiced, to particular forms and ways of reaſoning, the abſurdity of which they cannot readily diveſt themſelves of.

A CHILD, upon his entrance into the world, undergoes a great many changes; and thoſe ſo ſudden and material, that it ſeems a matter of ſome ſurpriſe greater numbers do not periſh at that

that period. The changes, which may be conſidered of the moſt importance, are thoſe which are produced by, and proceed from, the action of the *Air*; as it affects the lungs, in breathing; and the ſurface of the body, by its coldneſs. No human being could, at any other period, undergo ſo ſudden and extraordinary a change, and degree of heat and cold, without the moſt immediate and fatal conſequences. The breathing is an operation entirely new, and is, for the moſt part, performed inſtantaneouſly; as the lungs, which are the immediate organs, and deſtined ſolely to the purpoſe, of reſpiration or breathing, are inactive and uſeleſs before birth. This operation of breathing is commonly at firſt ſo laborious and difficult, and effected in ſo ſhort a ſpace of time, that a child at this time undergoes a great deal of pain and fatigue, as is diſcovered by his fretfulneſs and uneaſineſs, and the laborious heavings and pantings of the breaſt: for the lungs, not being before accuſtomed to their office, are ſome time before they become reconciled to the effect of the cold air upon them, and are properly diſtended and fitted for it.*

THESE

* *To the Medical Reader.*——PHYSIOLOGISTS have differed in their manner of accounting for the beginniug of reſpiration in animals. Dr. Whytt in his Eſſay on the vital, &c. Motions

THESE conſiderations are here premiſed, with a view of pointing out the propriety and neceſſity of doing all in our power to aſſiſt and enable the child to encounter theſe difficulties. The means are

tions of Animals, p. 228, 2d edit. enumerates the ſeveral opinions. He obſerves; that Dr. Pitcairn ſuppoſes it to happen by the preſſure of the air, which is forced into the lungs as into a vacuum. *Diſſert. de cauſ. qua ſang. fluit. per pulmon. Sect.* xiv. *p.* 53. This however, he obſerves, is not the caſe in dead-born *fœtuſes*; and it is leſs likely that it can poſſibly happen with thoſe that are born alive.—That, "the "great *Boerhaave*, after *Thruſton* and *Borelli*, aſcribes it to "the *fœtus* moving all its muſcles violently in the time of "birth, and, among the reſt, the intercoſtals and diaphragm. "*Inſtitut. Med.* §. 691."—And *M. de Haller*, from the endeavours of the *fœtus* to cry, upon account of its uneaſy ſituation at this period. *Not.* a *in Boerhaave's Inſt. Med.* §. 691.

THESE two laſt ſuppoſitions are however, as Dr. Whytt obſerves, as unſatisfactory as the former: and from the following circumſtance, which I was witneſs to, their plauſibility ſeems leſſened. In a caſe of the Cæſarean ſection, at the Infirmary, Edinburgh, March 1767; where the maternal efforts, that from the beginning had been ſlight, and were ſtill leſſened for many hours at the laſt; I obſerved the fœtus to cry very ſtrongly almoſt immediately upon its expoſure to the air. Crying is to be conſidered as an *effect*, occaſioned, as Dr. Whytt obſerves, p. 243, by "an irregular kind of breathing, owing to ſome painful ſenſation:" perhaps that excited by the action of the cold air upon the glottis, larynx, and bronchia: and not as the cauſe of reſpiration.—What M. de *Haller*

are ſimple and obvious, and ſuch as are generally practiſed, in part. A piece of new flannel, commonly known by the name of a *Receiver*, is very properly made uſe of to wrap the child in before he

Haller farther mentions, in his *Element. Phyſiol. Tom.* III. p. 318, of a fœtus being enabled to breathe at its birth by ſwallowing the *liquor amnii* during geſtation, is equally futile with the above; as the Doctor obſerves, p. 245, that deglution and reſpiration have no connection.

Dr. Whytt attributes the beginning of reſpiration to, what he terms, an *appetite* for breathing; depending upon a ſenſation, deſire, or call in the lungs for air, as in the ſtomach for food, which is adapted to *gratify* that *appetite*.—But, if that was the *only* exciting cauſe, it is probable that that appetite would frequently occaſion efforts to breath before birth, which muſt as conſtantly and certainly be attended with immediate ſuffocation: for we cannot ſuppoſe, with our learned and ingenious author p. 237, that "the water ſurrounding the fœtus would certainly hinder its making any "efforts to inſpire, *though it were ſuppoſed ever ſo deſirous* "*of doing it*," any more than we can imagine an animal that had already breathed would be prevented making a like effort when immerſed in water. As many perfect pieces of machinery, when completed, cannot of themſelves go into motion, but require to have it given to them; ſo the machine of reſpiration may at firſt ſtand in need of the ſame aſſiſtance: and, it is extremely probable, that, air, is the agent, employed upon this occaſion; which, by its ſtimulus, *or as food ſuited to gratify the appetite of reſpiration*, is diſpoſed and adapted to excite the action of the *glottis*; and the glottis, by its

he is dreſſed; in which ſituation he ought to continue, very cloſely covered up, with the mouth and noſe ſcarcely expoſed, upon the knee of ſome attendant, within the air of the fire, (even in ſummer) in a room apart from the mother, if convenient, to prevent her being diſturbed or

its immediate and palpable conſent with the lungs, diaphragm and intercoſtal muſcles, theſe latter; whereby the motion and exerciſe of the whole takes place. Therefore, admitting, with our author, that there is before birth an appetite or diſpoſition, "owing to particular ſenſations in the body," to breathe; yet, that appetite muſt be conſidered as paſſive, depending upon the action of the air to excite it. For as the air is ſo eſſential to reſpiration, it may be ſuppoſed the moſt likely to direct and govern it from the beginning; and that its beginning is not ſubmitted to any other exciting cauſe; as any other muſt be uncertain and precarious.

Dr. Whytt obſerves, p. 237, that "air being applied "after birth to the *face*, *mouth* and *noſtrils* of the animal, may "put it upon eſſaying a new action"—and that—"*perhaps* "the *appetite* of breathing may be increaſed in a *fœtus* by the "preſence of a fluid fitly anſwering its demands:" But does not hint at the action of the air upon the glottis: and, throughout, ſeems rather to reſt the whole upon the appetite or ſentient principle, prompted and increaſed by the determination of blood to the lungs near and at the birth, than any other cauſe: although he obſerves, p. 199 of the ſame work, that a ſtimulus to the glottis is ſufficient to put the whole machine of reſpiration in motion; as is to be diſcovered when the leaſt particle or drop of any thing gets by accident into the glottis.

over

over-heated, for a quarter, or half an hour; by which means the child will be, in part, relieved from the firſt ſhock of the cold air upon his body, and become more gradually accuſtomed to the feel and effect of it, and will alſo have time given him to recover from the fatigues invariably attending his ſudden change of ſituation. Theſe conſiderations are ſeldom ſo ſtrictly attended to as they ſhould be, and particularly the laſt; as it is very uſual with nurſes to hurry on the children's cloaths as ſoon as poſſible, without allowing them the leaſt reſpite. No bad conſequence in the ſmalleſt degree can attend a little delay, if the child is kept well covered and warm; and his being ſettled and compoſed before he undergoes the hurry and fatigue of dreſſing, muſt be not only comfortable to him, but alſo highly proper and neceſſary.

During this interval, (viz. the time betwixt the birth and dreſſing) it is very common to give the child ſomething to clear his mouth and throat from phlegm, which is diſcovered by a rattling in the throat in taking the breath, and that even ſometimes to ſuch a degree as to appear alarming, although it is ſeldom or never in itſelf dangerous: for this purpoſe, butter and ſugar, mixed together, is commonly forced into his mouth, which being a very nauſeous mixture,

generally occaſions a ſickneſs, by which the phlegm is brought up: but as ſickneſs, at this time, will add to the fatigue, and may ſometimes hurry a weak child, it ſeems adviſable to avoid it: a little brown ſugar, diſſolved in water, and given gradually in a teaſpoon, will diſlodge and waſh down the phlegm; and as it does not occaſion ſickneſs, muſt be more pleaſant and palatable; as children, even ſo early, have the ſenſe of taſte more perfect than might be ſuppoſed by a compariſon with the other ſenſes, as the ſight, hearing, &c. and it ſeems a piece of wanton cruelty, in our firſt office to them, to give them ſo diſagreeable a ſalute, eſpecially when it may more properly be avoided. When, therefore, the breathing is *tolerably* free, it will be adviſable not to give any thing; as what is ſo given can anſwer no purpoſe, nor have any uſe. But when the rattling in the throat is urgent, and the breathing difficult, a little of the ſugar and water may be given, which will generally clear the throat ſufficiently.

A CHILD, from the ſudden effect and impreſſion of the cold air, is very liable to take cold at the time of his birth, from which he does not always readily recover, and which oftentimes is the cauſe of tedious, troubleſome, and dangerous complaints; as a cough and ſtuffing at the breaſt,

breaſt, the gripes with looſeneſs, ſore eyes, a ſtoppage in the noſe which proves very teazing and troubleſome to him in ſucking, &c. it is therefore of great conſequence to take particular care, at this juncture, to avoid expoſing the child to the cold air before he be dreſſed.

D R E S S.

IN dreſſing a new-born child, and indeed ever afterwards, ſimplicity and eaſe ſhould be conſulted and obſerved as much as poſſible: great care ought to be taken that no part of the body or limbs be tight bound, or cloſely confined by rollers or any part of the dreſs; as tight rolling and confining the limbs, which was formerly practiſed, muſt be very injurious, and muſt greatly impede and prevent the growth, ſtrength and activity of the infant. If it ſhould be urged, by ſome, that the tender frame of an infant requires to be particularly ſupported by rollers and bandages; it may be anſwered; that however plauſible the argument may, upon a ſuperficial inquiry appear, in favour of tight rolling; experience, the moſt ſure guide, convinces us, that children thrive much better without it, and are much more likely to be free from deformity; as the body and limbs, when at liberty and un-

fettered, are more likely to attain their natural ſhape and proportion, than by confining them to any particular poſition; it being well known that the bones of an infant are ſo pliant and flexible as to be capable of being molded into different ſhapes by rollers and bandages.

A FLANNEL roller, about four or ſix inches broad, is commonly rolled once or twice, *moderately* tight, about the body, upon the navel; and was originally and very properly deſigned to ſupport the navel, to prevent a rupture in it, to which it is ſubject at that tender age, from cauſes both natural and accidental. It is cuſtomary, in many parts of the kingdom, to roll a broad linen or crape roller *very tight* over this we have juſt now mentioned, a great many folds thick, all upon the body from the arm-pits to the hips, ſuppoſing the body to ſtand in need of ſuch ſupport; but which, however, as above obſerved, it does not, and therefore becomes not only unneceſſary, but hurtful. A broad flannel roller, over the ſhirt, looſely folding the body once or twice, is uſed by ſome nurſes, and is very proper, as it keeps the child more regularly warm than any other form of dreſs could do, and anſwers every purpoſe of ſupport very effectually, beſides being eaſy and comfortable; but care ſhould be taken, always to let it be

put

put on looſe enough. Thoſe who are accuſtomed to children will readily know when they are too tightly rolled, or confined in their dreſs; as they diſcover a particular kind of uneaſineſs, with a motion of their arms and body, ſeeming to ſtruggle as if they wanted to diſengage themſelves from ſome incumbrance or oppreſſion, attended with a continued reſtleſſneſs and fretting. I have ſeen children in great pain and diſtreſs from this cauſe, as they were inſtantly relieved and perfectly at eaſe upon removing or looſening the dreſs. This caution in dreſſing is well worth attending to, as any part of the dreſs, if put on very tight, will prove very painful and diſtreſſing to the child, and is what often happens through thoughtleſſneſs and want of care in ſervants who have the management of children, and who are very ſubject to commit this error, if they be not now and then looked after.

It does not appear neceſſary, in this place, to enter into a minute detail of the materials and compoſition of the dreſs of infants; they are much of the ſame quality throughout the kingdom, among all ranks and degrees of people. It may be ſufficient to obſerve in general, that they ſhould be light and warm; and that they ought to be dry and clean; for which purpoſe

it will be neceſſary to renew and change them very frequently.

THE number of PINS uſed in the dreſs of a child is ſometimes very great; but when *tapes* or *ſtrings* can be ſubſtituted for them, they are much preferable. The *foundling dreſſes*, ſo called from being firſt invented at the *foundling* hoſpital, for the ſake, no doubt, of convenience and diſpatch, are come much into uſe. They draw and tye with ſtrings, and are otherwiſe ſo contrived, that very few pins become needful in putting them on. The advantages which attend a dreſs ſo contrived and put on, are conſiderable enough to recommend it. In the firſt place, the riſque of pricking and wounding the tender bodies of children is avoided, which will now and then happen, notwithſtanding the utmoſt care and caution, where a great many pins are uſed: and ſecondly, the dreſs ſits much eaſier and pleaſanter, and is put on with more diſpatch and leſs fatigue to the child.—The CAP is ſimple; and, when put on, has a neatneſs in it which ſurpaſſes all the ſtudied and expenſive finery that has ever yet been deviſed for that purpoſe; and which perhaps may be accounted for in conformity with the opinion a great many have, that a young child looks the beſt in its night-cap, which this reſembles.

QUICKNESS

QUICKNESS and DISPATCH in dreſſing, are proper to be obſerved, eſpecially at the firſt, to avoid fatigue, but more particularly cold and its troubleſome and even dangerous conſequences.

WARMTH and REST are invariably requiſite, cannot be too ſtrictly enjoined, and ought to be inſeparably connected during the month, or, more particularly, the firſt fortnight; during which period children ſhould be indulged in them to the utmoſt, and ſhould ſeldom or never be moved or diſturbed, except to be fed, dreſſed, or cleaned.

THE moſt convincing and ſatisfactory arguments in favour of uninterrupted and conſtant warmth and quiet are deducible, and may be gathered from the two following general obſervations which are to be made upon children.

1. A CHILD, who thrives well, is naturally diſpoſed to *reſt* and *ſleep*, and is fond of *warmth*; as appears by

2. A CHILD, who is much diſturbed, or expoſed to the *cold air*, being more fretful and uneaſy than when kept *ſtill* and *warm*.

THUS nature dictates! and we need not a more ſure and unerring guide to direct us, in this inſtance: for if nature or inſtinct, can, or will dictate, direct, or interfere at any period of our exiſtence, it may reaſonably be ſuppoſed to do it

at that time when we are the leaſt capable of directing or aſſiſting ourſelves.

CHILDREN never ſeem ſo eaſy, nor ſleep ſo ſound, as when they are cloſe covered up in bed: and it would be no eaſy matter to ſuffocate a new-born child, although you wrap him up ever ſo cloſe in the bed cloaths, ſo as apparently to exclude the external air from him, provided no violence is done by preſſure upon his mouth and noſe, or any other part of the body.

WARMTH, ſhould be as regularly and conſtantly ſupported as may be; 1ſt by a moderate warmth of the room; out of which a child ſhould be carried as ſeldom as poſſible, eſpecially to any diſtant part of the houſe. 2dly by warm clothing; which, as before obſerved, ſhould be light and ſit eaſy, and changed or removed as often as it is wet or foul. It is ſcarcely neceſſary to obſerve, that a child ought to be always changed or dreſſed near the fire, even in ſummer; and for this purpoſe, a room immediately adjoining the mother, to prevent her being over-heated or diſturbed, will be moſt adviſable, when it is convenient to have it ſo. And 3dly, during the time of reſt and ſleeping.—Various kinds and forms of beds have been adopted for children to ſleep in; but none of them ſeems better, or ſo well calculated as a

common

common bed; upon which they may be laid, between the blankets in the day, where they will lie eaſy, and will be comfortably warm; and at night, in bed with the mother or nurſe. Cribs, and other contrivances for children to ſleep in in the night, ſeem by no means adapted to this climate, at this *early* age; and cannot, in cold weather or winter, be ſo comfortable and naturally and regularly warm as a common bed: they ſeem more calculated for the eaſe and convenience of the nurſe, than the comfort and benefit of the child; and very young children will ſeldom reſt ſo eaſy and well in them as in bed with the nurſe; as, at that helpleſs age, they will frequently make ſurpriſing efforts and attempts, when in bed with the nurſe, to get near her, and are ſeldom ſo eaſy and contented as when they are ſo ſituated: a proof, that warmth is agreeable to them; and, as it can be no other than an inſtinctive requiſite, ought to be indulged.

The objections which have been made to a child's ſleeping with the nurſe, are; there may be danger of a nurſe's overlaying the child; but of this there is little fear, if ſhe has been accuſtomed to ſleep with children; and is an accident that ſcarcely happens once in an age with thoſe who have *not* been accuſtomed to it.

Another

Another objection is, that of learning the child a cuſtom it may hereafter be difficult to break him of: but this ſeems founded more upon ſurmiſe than reality; as it may be generally effected, with a little pains taking, at a proper ſeaſon; which time and ſeaſon remains to be mentioned hereafter under the heads of Air, Exerciſe and Waſhing.*

REST, or QUIET, ſeems the next eſſential requiſite to warmth; indeed they are, as above obſerved, inſeparably connected; for if a child is not kept ſtill and quiet, he cannot be ſufficiently and regularly warm. Children, at this age, ſhow evident tokens and marks of diſlike to extraordinary motion: they are fretful, and appear

* UPON the coaſts of Africa, and in other climates of the like temperature, we are informed that infants are early expoſed in the open air. There, the regular and continued warmth of climate renders ſuch expoſure ſafe: but the compariſon and practice will by no means apply to this climate, where our moſt warm and favourable ſeaſons are ſo liable to be interrupted by ſudden and frequent varieties and changes in the weather: and, there is not perhaps a country in the world where ſo many complaints are produced by the numerous, ſudden and unexpected changes in the weather, as in this.—Would nurſes *now* obſerve the ſame ſtrict care in preſerving infants from cold as they *formerly* did (and many yet do) the mother in lying-in, it would be the beſt maxim they could adopt.

fearful

fearful and alarmed when they are thrown in the arms or haſtily moved: from which, may it not be inferred, that they are not, even ſo early, entirely deſtitute of mental ſenſations? and that the mind is as ſuſceptible of the impreſſion of fear (in this inſtance) as the body is of pain? A child will, upon the lap, often very apparently diſcover an apprehenſion of falling, by a ſudden ſtart, attended with a ſinking; as is evidently perceived by the knee of the nurſe; throwing out his arms at the ſame inſtant, as if to catch and ſave himſelf from falling; and which differs greatly from the ſtarting or twitching occaſioned by gripes, or any other ſimilar cauſe, as it exactly reſembles the ſenſation and effect a grown-up perſon has, who when, between ſleeping and waking, he fancies himſelf falling from an eminence. This ſenſe of fear in children is diſcovered, with exactly the ſame appearances, when they are quickly moved or toſſed in the arms, awake.

It has been a doubt with philoſophers, whether or not, children at this age have ideas or mental conception; and they have been at a loſs at what time, and by what token, the firſt dawning of the intellectual faculty is to be diſcovered: it is a point which perhaps may never be fully elucidated and determined, by poſitive proof;

proof; how far the above circumſtance may be one means of leading to a diſcovery, time, and future obſervation, may determine: there can be little doubt, from it, that children, at this period, have mental feelings or ſenſations, and that the fact itſelf will, conjunctively with other arguments, ſerve to point out to us the impropriety of much motion and exerciſe at this very early age. Very great and ſudden changes and tranſitions are never grateful to the human conſtitution, (in a natural or healthy ſtate) at any period: and when material changes are to be made, the more gradually they are introduced, at firſt eſpecially, the better; the neceſſity of which is in no one inſtance more ſtriking and obvious, than in the caſe of infants, who would experience ſo great and ſudden a change, from a ſtate of continued warmth and quiet, to the oppoſite extremes, as would frequently prove fatal, if we did not do all in our power to prevent it.

It may ſeem proper in this place to determine and fix upon the time and manner in which theſe changes are to take place: and from what has already been obſerved, the following general rules may be adopted, as far as circumſtances will admit.

In the *firſt week*, a child ſhould not be carried out of the room, except into one immediately adjoining, and that, for neceſſary purpoſes, as dreſſing, &c. but be kept in bed, conſtantly, or as long as he is diſpoſed to ſleep or lie quiet, and never otherwiſe be diſturbed, except to be fed, dreſſed, or cleaned.

During the *ſecond week*, the ſame rules are to be obſerved, except that, towards the end of it, the child may be allowed to lie upon the nurſe's knee, near the fire, and to be gently moved or dandled once or twice a day, for a little time.

During the *third week*, the time of the child's being up and out of bed may be lengthened; and he may be gently carried about the room, which will be a means of introducing him gradually, to a ſtrange, and, often, alarming ſenſation, viz. motion.

In the *fourth week*, the motion may be a little increaſed; but which it ſhould not be to ſuch a degree as to ſhake or agitate the child much. If the weather be warm, he may, towards the latter end of the week, be taken into any part of the houſe which is not cold or damp; but if the ſeaſon is cold, it will be more adviſable to defer it a week or two longer. This ſeems too early, notwithſtanding the ſeaſon may be favourable,

vourable, to venture out of doors into the open air.

ALTHOUGH all degrees of, what may, by ſome, be termed *proper* exerciſe are omitted in the above rules; yet when it is conſidered, that the dreſſing, waſhing, ſhifting, and feeding, are all performed daily, and ſome of them repeatedly each day; they will be found to amount not only to ſufficient excerciſe, but even fatigue, for the firſt or ſecond week. No doubt particular circumſtances and ſituations will very frequently make a deviation from the above general rules; in ſome caſes, proper; in others, unavoidable; as the ſeaſon of the year, the child's health, family ſituations and conveniences, &c. for which proper allowances muſt be made: yet theſe will ſeldom happen, to ſuch a degree, as to prevent a compliance with them, in part.*

IT is of late become a practice with ſome to adviſe and direct the ſhaking and toſſing of infants, and expoſing them to the light and air of the room, repeatedly through the day; and that, on the day, or a day or two after they are born: alſo, carrying them out of the room, and

* WHAT remains farther to be obſerved upon the ſubject of air, exerciſe, &c. will be more particularly noticed in its proper place.

into

into the open air, very ſoon afterwards. The motives for this practice are (moſt likely) founded upon the general opinion of air and exerciſe being conducive to health and ſtrength: ſo they undoubtedly are; and are found to be highly expedient, as well, to preſerve the human conſtitution in a ſtate of health, as to reſtore it when impaired: yet as the beſt remedies are ſerviceable only as they are judiciouſly proportioned and adminiſtered; ſo, conſiſtency, upon this occaſion, ſhould never be loſt ſight of. We find nature ſeeks for, and takes delight in, different kinds and degrees of exerciſe and air, ſuited to the different periods and ſtages of life: and although children, and the young of all animals, are at a certain period diſpoſed to be more active and playful than at any other; yet it muſt be conſidered that, deſire, and even ability for motion, do not take place the moment of their birth; (a few inſtances in the whole animal creation excepted) but that they require an uninterrupted ſtate of warmth and quiet, for ſome time, to perfect and fit them for motion and the operation and effect of the external air; which, in ſevere ſeaſons, proves very fatal to thoſe that, even by nature, are the beſt provided againſt it.

It may perhaps be ſaid, that exerciſe, begun ſo early, will forward a child, and be a means of bringing him ſooner to the uſe of his limbs: yet if nature, as has been obſerved, has not then perfected and fitted theſe limbs for motion, we may do harm by forcing them beyond what they are capable of. It alſo does not appear likely, that a child, who is by nature of a ſtrong or active frame, will have it impaired, or the progreſs of it ſenſibly retarded, by a month's confinement at his birth: for, notwithſtanding the indulgences we have been ſpeaking of, it will be far from a ſtate of total inaction, as the limbs and every part of the body will be conſiderably exerciſed by the waſhing, dreſſing, &c. which is daily and regularly practiſed; and which is as much, when properly performed, as can ever be immediately and eſſentially neceſſary for health, at this period.

It is remarked, that a greater proportion of the children of the poor and indigent die in their *early* infancy, than thoſe of the more opulent; and is accounted for from a want of warmth, which it is impoſſible they can have in the cold, uncomfortable, and, frequently, miſerable habitations which fall to the lot of the poor and needy, in large towns eſpecially; added to the great defect in the quantity and

quality

quality of their clothing: they ſeldom ſuffer for want of food, which they are commonly ſupplied with, very plentifully, by the mothers; as poor, laborious women often have a great quantity of ſuck.—Admitting, however, that the number of deaths of the poor and rich are nearly equal at this period; as the moſt prevailing cauſes of death, in the month, may be ſaid to be cold, and improper food (as will be immediately explained;) it is obvious, that cold taken at or ſoon after the birth, muſt be the moſt general and prevailing cauſe of death with the poor of large towns; and that, conſequently, it becomes a circumſtance of very great importance to be duly attended to, by all ranks, in every ſituation.

The children of the poor, who ſurvive the period of early infancy, generally appear more hardy and ſtrong than thoſe of the rich; as, thoſe of the latter, although puny and weak at the birth, very often (eſpecially when wet-nurſed), by care and indulgences, ſurvive this period; but, which very rarely is the caſe with thoſe of the former, from, perhaps, a want of theſe indulgences: and, there can be no doubt, that free exerciſe and expoſure to the weather, which the poor experience free from luxury and indulgences, will contribute to health, at a la-

ter period; although it will, as it ſo very commonly does, prove injurious and fatal, more early.

F O O D.

IT cannot be doubted that breaſt-milk is the moſt natural as well as proper food for a child: but it happens, that ſome mothers are not diſpoſed to ſuckle their own children; and that others are not capable of doing it for want of milk: and, in large towns, the difficulty that attends getting good wet nurſes, and the danger attending bad ones, induce many to prefer bringing up a child with the ſpoon, which is commonly called dry nurſing, to the riſque of getting a bad wet nurſe. When a child is healthy and ſtrong, this latter mode, of dry nurſing, may be adopted with the moſt propriety, and a proſpect of ſucceſs; but when a child is ſickly, weak, or croſs-tempered, it will generally be found a perplexing, difficult piece of buſineſs.

A CHILD does not require food very ſoon after his birth, nor is the mother capable of giving it immediately; nature therefore has wiſely ordered, that the infants call, and the mother's ability to ſupply it, ſhall keep pace with each other. As a child, before birth, has received

no

no nouriſhment by the mouth; ſo the mouth, ſtomach, and other organs of digeſtion, are not immediately in a proper ſtate and ſituation to exerciſe their different offices.* The ſtomach and bowels are lined with a mucous thick matter, of a black colour, called *meconium*; which is diſcharged in the courſe of the firſt or ſecond day by

* *To the Medical Reader.*——As it cannot be ſuppoſed that any of the ſecretions ſubſervient to the purpoſes of digeſtion, viz. the ſaliva, gaſtric juices, the bile, &c. are, at the birth, or immediately afterwards, duly prepared and given out in ſufficient quantities for that purpoſe; ſo, food, of any kind, for want of theſe natural aids to its digeſtion and aſſimilation, will be offenſive to the ſtomach, and which it muſt either reject upward, or paſs downward in a crude, indigeſted ſtate. The *meconium* and other contents of the bowels and ſtomach, which before birth no doubt have had their uſes and deſigns, yet are afterwards to be conſidered in the light of extraneous bodies; and it ſeems highly probable that, until they are excluded, the digeſtion cannot properly commence, nor can the abſorption of chyle by the lacteals take place. Should it be aſked: may not food be properly given to clear away this (now) extraneous matter, and to excite and accelerate the natural ſecretions? It may be anſwered: it is abſurd and unphiloſophical to ſuppoſe that *Nature*, in ſo eſſential a matter, ſhould be defective, and that ſhe ſhould be incapable of or unprovided with regular powers and a ſtated law and period for accompliſhing ſo important an intention, without any accidental aſſiſtance;

by ſtool; and until this is purged off, the child can receive little, or perhaps *no* nouriſhment from food of any kind; and which is, therefore, better omitted. It is, by ſome, thought neceſſary to give the child ſomething to carry off this black matter; but which there is ſeldom or never any occaſion to do, as the child generally has a ſtool or two the firſt or ſecond day; and which

otherwiſe, the conſequences, in a ſtate of nature, (the moſt concluſive mode of reaſoning upon this occaſion) are very obvious.—Therefore, from the inaptitude of food to the purpoſes of digeſtion and nutrition, and from its being contrary to the deſign and order of nature, at this juncture; is it not more conſiſtent and rational; is it not, in general, found more advantageous in practice, to delay giving it until *nature* requires it on one part, and provides it on the other? And even if, by the above means, we had it in our power to haſten the operations of nature; might not the effects of ſuch premature exertion be as unfavourable, or more ſo, than thoſe from a ſhort procraſtination?

That the *gaſtric* and other juices eſſential to the purpoſes of digeſtion are either not ſecreted, or not in a proper ſtate to act upon the food, appears by children's ſeldom or never regularly poſſeting, or throwing up half digeſted milk, for the firſt three or four days, or even a week, although they are ſupplied with the breaſt during that time; which muſt as regularly and certainly happen if the milk was then acted upon by thoſe juices in the manner it afterwards is. *See the following note to the* medical reader *on the* digeſtion *of the* food.

if he ſhould not, a little of the ſyrup of violets, manna, or a teaſpoonful or two of the ſyrup of rhubarb, may be given to procure it; but the leſs ſuch like things are uſed, the better; as they ſometimes occaſion troubleſome gripings and looſeneſſes.

As it is commonly two, three, or even ſometimes four days before the mother has milk for her child, it is uſual to give him ſome kind of food during that interval; but, from what has juſt now been obſerved, there can be little or no occaſion for it: however, if it did no harm, there would be leſs occaſion to forbid it; but which it certainly does, and that, oftener than is ſuſpected. It is very common for children to be croſs the few days before they get the breaſt, and which is moſtly obſerved to be occaſioned by griping; which griping is ſure to happen, in a greater or leſs degree, very often conſiderably, if any kind of food, except breaſt milk, has been given; and which is very eaſily and clearly accounted for (and will appear, by obſervation, to be ſo), when we conſider the quality and compoſition of the food that is almoſt univerſally given;—namely,—*panada*, or *pap*; which is compoſed of bread and water boiled and ſweetened with brown ſugar; to which is, ſometimes, added a ſmall quantity of milk: or; oatmeal and

water, in the form of thin water gruel, with the ſame additions.

ALTHOUGH theſe have been intended for, and may ſeem to be, compoſitions that are palatable and light, and ſuch as might be eaſy to the ſtomach at a more advanced age; yet, upon proper examination, they will not be found ſo well ſuited to a child, at this age, as might be wiſhed, and as will appear by making a compariſon between this kind of food and the mother's milk; which ſeems the likelieſt method of placing the matter in a proper point of view. In doing this, it will be proper to examine diſtinctly the parts which compoſe this food; the principal and moſt material of which is

BREAD; which, in whatever ſhape or form it is made or given, is a ſubſtance, we muſt acknowledge, the ſtomach is not naturally intended, diſpoſed, or prepared to receive; therefore, no wonder, if it ſhould frequently diſagree; and which it may reaſonably be ſuppoſed to do, from its weight, vegitable quality, or ſome particular antipathy, inaptitude, or diſlike the ſtomach has to any thing ſolid; which laſt ſeems one very probable reaſon; as, when it happens to diſagree, all kinds of bread are equally alike diſagreeable, and that, commonly, even in the ſmalleſt quantity, and which I have frequently obſerved

obſerved it to do with children, in other reſpects, remarkably ſtrong and healthy, who could not bear the moſt trifling quantity of bread, of any ſort, in their food without giving them apparent uneaſineſs. *Bread* may be known to diſagree, when the food which contains it is rejected, or thrown up ſoon after it is taken, unaltered or unchanged in its appearance: or, by a looſeneſs with much griping and green, ſour ſtools; but it moſt commonly happens that the ſickneſs, and the griping with looſeneſs, both occur together. The child upon this occaſion is *ſometimes* obſerved to have a very great diſlike to the food when it is made thick with bread, and it is with difficulty he can be got to take it; but which he will take more readily, and with more pleaſure, when it is made thin. If the bread ſhould contain alum, or have undergone any other adulteration, the bad effects of it will be increaſed. Water, that has had a piece of bread boiled in it, when mixed with milk, ſeems the leaſt exceptionable manner of giving (if it can be called giving) bread.

Oatmeal, in the form of water gruel, caudle, &c. is liable to the ſame objections with bread, as it produces much the ſame effects.

Sugar cannot be excepted to exactly upon the ſame ground as bread; as, when it is mixed with

the food, it diſſolves, and cannot therefore offend the ſtomach by its weight, or ſubſtance; yet there is a very powerful objection to it, which is; that as ſugar is diſpoſed to turn ſour upon the ſtronger ſtomach of a grown up perſon, it certainly, and without any doubt will do it, in a much greater degree, with an infant, and will have a perpetual tendency to promote griping with, or without looſeneſs; and, when ſuch complaints do exiſt, will add to them greatly.

Sugar is almoſt univerſally put into the food of children; and the reaſons given for it are; that it makes the food palatable, and which, it is ſuppoſed, a child will not take, ſo well, without it: and that, as it is rather looſening (when brown ſugar is made uſe of), it will help to keep the body open. With reſpect to the former of theſe reaſons, it may be obſerved; that if a child, from the beginning, is not accuſtomed to ſugar, he will undoubtedly take his food juſt as well without it (a very few, if any, exceptions to the contrary). But if he has been uſed to it for ſome time, there may be ſome difficulty in weaning him from it; yet that may generally be done by making a proper trial. As habits are not ſubdued without ſome difficulty at ſo early a period; we cannot be too guarded againſt ſuch as may have an injurious tendency,

even

even at this tender age. In anſwer to the latter argument in favour of ſugar, it may alſo be obſerved; it very ſeldom happens that children have occaſion for any thing opening, as they are at this age, if in health, naturally diſpoſed to be open in their bodies; and when, at any time, they are otherwiſe, a little manna, caſtor oil, or magneſia, which may be given ſafely at any time, will be better for the purpoſe; as, any thing taken as a medicine conſtantly, loſes, in a great meaſure, its effect; and, on that account, becomes of very little uſe when moſt wanted. It may be ſaid, the mother's milk is ſweetiſh: it is ſo; and there could be no impropriety in imitating that ſaccharine or ſugar-like flavour, provided the means uſed for that purpoſe were perfectly, or nearly, conſiſtent and unexceptionable on other accounts. Although ſugar imparts a ſweetneſs to the food that gives it the flavour of the mother's milk; yet it adds, at the ſame time, other qualities which are foreign to it, and which make it an improper ſubſtitute. The natural ſweetneſs of the breaſt milk, and that which is produced by ſugar, although much alike to the taſte, may differ as much in quality as any other two ſweet things: honey and ſugar reſemble each other a good deal in flavour, yet differ very materially in quality,

and

and effect, when uſed as part of the diet or for other purpoſes: ſo may and does the natural ſweetneſs of the breaſt-milk, and that produced by ſugar, or any other ſweet ſubſtitute that has yet been diſcovered.

THE third and laſt article that compoſes this food, is WATER; which, when ſoft and pure, is not liable to any exception. MILK, is ſeldom added the firſt two or three days; yet, in a ſmall quantity, it would be an uſeful addition; although it will but very imperfectly counteract or leſſen the injurious effects of the BREAD and SUGAR.

HAVING deſcanted upon the qualities of the materials of which this food is compoſed; it may not be amiſs further to explain how and in what manner it muſt conſtantly diſagree, more or leſs, with an infant; in doing which, it will be neceſſary to conſider; that the digeſtion of the food in the ſtomach is a proceſs by nature eſtabliſhed and ſupported, in the ſame regular, uniform manner, and with little variation, during life; and that to ſupport this regularity, nature has provided for us, and directed us to the choice of, ſuch kinds of food as are beſt ſuited to our ſupport at the different periods of our life; from which if we ſenſibly deviate, the digeſtion will be interrupted, or go wrong,

which

which muſt throw the ſtomach and bowels into diſorder, and by which the whole body, if the change be conſiderable or continued, muſt ſuffer. There can be no doubt that the mother's milk is the only ſuſtenance nature has deſigned for an infant at the time of his birth; that the ſtomach and digeſtive organs are accordingly particularly calculated and prepared to receive it; and that any other kind of food, which is foreign to, or differs very eſſentially or materially from it, muſt diſagree more ſenſibly at this tender age, when the digeſtive organs are weak and imperfect, and, therefore, leſs able to overcome an error or irregularity from the diet, than at a future and more advanced period, when they have acquired a degree of ſtrength.

The Digestion of our food is always accompanied with, and (ſo far as has been diſcovered) depends chiefly upon a fermentation in the ſtomach; which goes on with great regularity in a ſtate of health, unleſs interrupted or diſturbed by ſomething taken into the ſtomach which is foreign, unnatural, or unadapted to it; or which, by its quality, will check, retard, or vary the proper fermentation.

The effect and reſult of *fermentation* varies according to the nature and quality of the ſubſtances made uſe of for that purpoſe. For example;

ample; it is well known to every perſon, that any *vegetable* ſubſtance, as flour; oatmeal; bread of all ſorts; cabbage, and all greens; fruit of all kinds, ripe or unripe; turnips, and all kinds of roots; ſugar; &c. &c. when mixed with water or watery liquors will, in hot weather, or when placed in a moderate degree of warmth, ferment, or *work* as it is commonly expreſſed; and, if this working or fermentation is not ſtopped or checked, will very ſoon turn ſour: it is by this means and on this principle the vegetable acids or vinegars of all ſorts are made from different fruits and vegetables; and which is termed the acetous or acid fermentation.—Again; when any *animal* ſubſtance, as fleſh-meat, fowl, fiſh; or the broth, gravy, or juices of any of them are mixed with water or watery liquors, and placed in a moderate degree of heat, they will, like the vegetables, ferment or work; but the reſult of this fermentation or working is widely different from that of the vegetables, and is called the *putrid* fermentation, very nauſeous and offenſive to the ſmell and taſte. The products of theſe two ſimilar proceſſes are as oppoſite as any two things in nature: the firſt being named *acid*, and the other *alkali*; the effect of vegetable and animal fermentation.

FROM what is here obſerved, it will be eaſy to conceive how well ſuited the *ſtomach* is, from its warmth, its natural juices, and the liquids regularly taken into it, to diſpoſe the vegetable and animal food which we daily receive into it, and upon which we ſubſiſt, to ferment; and which happens very much in the ſame manner in, as out of, the body.*

THE human frame and conſtitution is ſo diſpoſed by nature, as to require its ſupport and nouriſhment from a combination of the efforts and effects of theſe two different fermenting ſubſtances (for ſtones, minerals, and every thing elſe in nature that is not capable of fermentation, will afford no nouriſhment to the body); and therefore the regularity of the digeſtion of the food, and the conſequent health of the body, depend very much upon the quality and due aſſortment and mixture of theſe different ſubſtances or foods in the ſtomach: for if either the acid or putrid quality prevails too much, and for a continued length of time, the health will ſuffer by it; and, in either caſe, the food cannot, for want of a proper and ſuitable fermentation in the ſtomach, yield and

* WINE is the reſult and product of vegetable fermentation, which is called the vinous fermentation; but this reſult of vegetable fermentation never takes place in the ſtomach, and may be always prevented out of it.

give

give out its proper nouriſhment: hence the ſtomach and bowels are diſordered for the preſent, and muſt loſe their ſtrength and powers in common with the other parts of the body; and, if the cauſe is continued, will lay the foundation for many diſeaſes.—But when ſuitable proportions of animal and vegetable food are received into the ſtomach together, a proper fermentation enſues, by which the digeſtion goes on briſkly, freely, and without interruption; the food affords due nouriſhment, is grateful to the ſtomach and bowels, and does not diſturb them or occaſion any uneaſineſs in them (for it is neceſſary to a good digeſtion that it be quick and haſty; as whatever lays upon the ſtomach without digeſting readily, does not digeſt perfectly, and always gives uneaſineſs): hence the propriety of, and the natural deſire and inclination we have for, a mixture of animal and vegetable food conſtantly and regularly in our diet.

The injuries done to the human body by errors in the proportioning of animal and vegetable food are as follow.

First, with reſpect to animal food, it is to be obſerved; that from nature's bountiful ſupply of vegetables and vegetable productions, in the form of fruit, roots, bread, &c. wine, beer, and other fermented liquors, throughout the habitable world,

world, injuries from exceſs of animal food rarely happen (eſpecially to infants, in this part of the world): however, when from any accidental, occaſional cauſe they do happen, a corruption and deſtruction of the body, from an exceſſive prevalence of the putrid fermentation, muſt, if the cauſe be continued, enſue; and which is the caſe in the ſea-ſcurvy, when, in long voyages, the ſeamen are deprived of, or reſtrained in, the uſe of vegetable diet: and if any of the human ſpecies were to be confined entirely to the uſe of animal food, of whatever kind, and water (pure water partakes of neither an animal nor vegetable quality in the ſmalleſt degree), they would very ſoon die in the ſituation here deſcribed.

Secondly, with reſpect to vegetable food, it is to be obſerved; that an exceſs of it will not upon *all* occaſions be immediately fatal; yet it is, with all, in a natural and healthy ſtate, inadequate to the purpoſes of good health. For it is well known, that the ſourneſs that is produced in the ſtomach by a prevalence of the acid fermentation there (in conſequence of the too free uſe of vegetables), is not only injurious (as acids in all forms are) to the growth and nutrition of the body, but that it is alſo the cauſe of indigeſtion and ſevere and painful complaints in the the ſtomach and bowels: for when a perſon indulges frequently and freely in greens, fruit,

acids,

acids, and other vegetable productions, he will almoſt as certainly be troubled with a ſourneſs riſing from his ſtomach, the heartburn, or an uneaſineſs and ſenſe of a weight or load there; all or each of which are occaſioned by an exceſſive prevalence of the acid fermentation in the ſtomach, which checks and reſtrains the digeſtion, by which the food lies as a load upon the ſtomach, accompanied with a painful ſenſation and oppreſſion, and which is moſt commonly attended with coſtiveneſs with grown perſons; but with children a ſickneſs frequently, and generally a griping with looſeneſs.

As the hand of *Providence* is admirably diſplayed through the whole creation in connecting and adapting the ſeveral parts for the preſervation of the whole; ſo particular care has been taken to adapt food to every animal ſuitable to its ſituation. As the human race are not in any parts of the known world ſo circumſtanced as to be under a neceſſity of confining themſelves conſtantly and entirely to the uſe of animal food, ſo their nature is not calculated to ſubſiſt upon it: but as there are frequent occaſions in many parts of the world, where, if they could not ſubſiſt for long periods and ſeaſons upon vegetables alone, they muſt periſh, ſo nature has a proviſion made for ſuch occaſions; and this pro-

viſion

viſion is; a power in the animal conſtitution* to ſubdue, *in part*, an exceſs of the acid fermentation and its effects, by a natural diſpoſition in the animal to a putrid tendency, or putre-

* The proceſs in the animal conſtitution (as well human as brute) by which a change is effected in the quality or property of the vegetables they eat, (which change takes place partly during the digeſtion of the food, but chiefly after it mixes with the blood, as the nutritious parts of all food mix with the blood) is called *animalizing*; by which is meant, the converſion of vegetable into animal matter; and which will be readily conceived to take place, when it is conſidered, that a cow, or any other animal that lives entirely upon graſs and other vegetables, would change its own nature, and be converted into a vegetable, but for this power in the conſtitution to *animalize* the food that is taken.

As this power, however, varies in different animals according to their ſpecies or kind, ſo nature directs every animal to the choice of ſuch kind of food as is beſt ſuited to its conſtitution. Cows, and many other brutes, confine themſelves altogether to vegetables, and refuſe animal food, as their conſtitutions are prepared to *animalize*, that is, to convert vegetables into proper nouriſhment for their ſupport. Man, and ſome brutes, as the dog, cat, &c. from the nature of their conſtitutions, require a mixture of animal and vegetable food, and are found to thrive beſt when they get ſuch a proper mixture. Some of the birds require a mixture of animal and vegetable food; and although a very great majority of the feathered race, who are

putrefaction; and the greater the animal powers, that is, the ſtronger the conſtitution, the more this diſpoſition prevails; from which, it becomes very conſiderable with the ſtrong and healthy of grown

confined in their feeding to the land, live entirely upon vegetables, yet there are others that we find cannot, as the nightingale, wood-lark, robin red-breaſt, wren, &c. and who ſoon die when confined to grain, ſeeds, and other vegetables.

CLIMATE greatly influences and directs the diet. The inhabitants of warm and ſouthern climates require a large portion of vegetable diet to allay and obviate the effect of exceſſive heat, which, by favouring the putrid fermentation, tends to the putrefaction and deſtruction of the body: whilſt, on the contrary, thoſe of the northern climates require an ample ſupply of animal food (or fiſh, which is to be conſidered as being of the ſame quality) to ſupport and ſupply a degree of heat (which it affords) neceſſary to prevent and reſiſt the powerful action of cold. Theſe varieties in the diet are found proportioned to the degrees of climate. The inhabitants of ſome parts of Aſia are ſaid to live entirely upon vegetables: no doubt the vegetable productions of that country are numerous and in regular, alternate ſucceſſion; and very likely, from the warmth of the climate, may come to fuller perfection and maturity than we find them in the northern parts of Europe; from which, and being always to be had freſh and in perfection, they will be better ſuited to the purpoſes of digeſtion and nutrition; yet thoſe people are weak and effeminate.

THE farther we advance northward, the more we find the inhabitants diſpoſed to eat fleſh-meat; and, where they have

grown perſons; and of courſe but very ſlight and inconſiderable with infants.*

BREAD, and SUGAR, together or ſeparately, when mixed with *water*, in the form of *panada* or *pap*, are, in common with other *vegetables*, readily diſpoſed to turn ſour in a certain ſtate of

have it in the greateſt perfection and plenty, the healthier and ſtronger they are. In the moſt northern regions they eat a great part of their fleſh-meat and fiſh raw; and have very few vegetables; in the winter (which is very long) ſcarcely any except dried roots. In theſe two contraſted ſituations, of climate and diet, the inhabitants may, independent of exceſſive indulgences and debaucheries, be nearly alike healthy; although the latter muſt be, and are, more robuſt and ſtrong.—This kingdom, with reſpect to climate, is ſituated between the two extremes of heat and cold; yet as, throughout the year, the cold ſeaſon may be ſaid to exceed, in length, the warm; it follows, that a plentiful ſupply of animal food is neceſſary not only for the aſſimilation and digeſtion of the food, but alſo for the purpoſes of good health and ſtrength of conſtitution.

* THERE are ſome perſons, however, who cannot be ſaid to have ſtrong conſtitutions, who yet require more than uſual of the aceſcent or vegetable diet to ſupport this equilibrium in the digeſtion, owing to an uncommon diſpoſition in the conſtitution to the putrid fermentation; but is what happens to very few in this climate; and, when it does, is with grown perſons, and is ſcarcely or not at all obſervable or to be diſtinguiſhed in the early periods of infancy.

warmth, and with a ſlight degree of fermentation (as will convincingly appear by making the experiment): ſuch a mixture, therefore, taken into the ſtomach of an infant, where it will meet with nothing that will, in any conſiderable degree, counteract this acid tendency, muſt inevitably produce an acidity or ſourneſs, in a degree proportioned to the quantity taken, and the length of time it is continued. It is from this cauſe the ſour ſmell and green colour of childrens' ſtools proceed; which are always attended with griping and looſeneſs; ſometimes with convulſions; and which frequently prove fatal at this early period. When this food has been given to children, I have conſtantly obſerved them to have either a ſickneſs, or ſour, green ſtools with more or leſs of griping, or both, which have generally increaſed while the food was continued, and which were moſtly troubleſome, often alarming: and, on the contrary, when I have been able to prevail with a nurſe to avoid giving any thing until the mother's milk was ready, ſuch like appearances and ſymptoms have rarely occurred, and when they did, it has been in ſo ſlight and moderate a degree as not to diſturb the child, or be worth notice. It will, no doubt, now and then happen, that children, from cauſes which we are ſtrangers to, will have complaints in the ſtomach and

bowels

bowels that are alarming and dangerous; yet, if nothing in its nature ſour, or diſpoſed to turn ſour, be taken in at the mouth, the ſour ſmell and green colour of the ſtools will not happen, except, perhaps, in the ſlighteſt degree. Cold is a very common cauſe of griping with looſeneſs; but, in that caſe, the ſtools will be nearly of the natural colour, and free from ſourneſs, if nothing in the food conſpires to make them otherwiſe.

THE ſour ſmell, green colour, and the watery and often frothy appearance of the ſtools, are unerring ſigns, and the regular conſequences of the acid fermentation from improper food.

THE MOTHER'S MILK partakes of both the animal and vegetable quality, and therefore is, as nature deſigns it, perfectly ſuited to the purpoſes of digeſtion and nouriſhment for children.

COWS' MILK alſo partakes of both the animal and vegetable quality; and although it differs ſomewhat from breaſt-milk, may yet be ſubſtituted for the latter, and to advantage when properly directed and managed; as will be preſently explained; but it has not ſufficient powers and qualities effectually to correct the injurious effects of bread and ſugar, when mixed with them, although it will do it in part.*

FROM

* *To the Medical Reader.*——As no appearances, or but the moſt imperfect ones, of either an animal or vegetable

FROM this ſhort and familiar account of the *digeſtion* of the food, the propriety of attending to the quality of it, with children, is ſtrikingly obvious; as they are ill qualified, from their natural

quality are to be diſtinctly diſcovered in milk by the common teſt of an acid or alkali in a chemical analyſis, it has been conſidered as participating and being an intimate combination of both. Dr. *Cullen*, in his *Indicationes Curatoriæ* (as delivered in his lectures), when upon the *Nutrientia*, obſerves of milk, that it is to be conſidered as aliment in an *intermediate* ſtate between animal and vegetable. *Macquer* calls milk, "a liquor half changed into an animal juice."—This perfect, and, as it may be called, indiſſoluble combination of animal and vegetable matter, of which milk is compoſed, may account for its being in general ſo light and eaſy of digeſtion to weak ſtomachs; as it may, by ſuch preparation, require leſs aſſiſtance from the digeſtive and aſſimilating powers than any other mixture of animal and vegetable matter previouſly leſs combined: hence we may infer, that the proceſs in the digeſtion of milk (in a child's ſtomach particularly) differs a good deal from that of any other food. It is well and univerſally known that the juices of the ſtomachs of ſucking calves are diſpoſed to act in a particular manner upon the milk as ſoon as it is received by them; a familiar example of which appears in the making of cheeſe, where a portion of the ſtomach of a calf is macerated in water a few hours, to extract its juices, which being put into a quantity of milk, previouſly warmed to about the degree of animal heat, occaſions a ſeparation of its parts into a ſoft curd and whey: which, without

natural weakneſs and delicacy, to combat the effects of a material irregularity in it.

Sir John Pringle, a phyſician of eminence, has been at great pains in inveſtigating and aſcertaining

without doubt, is very ſimilar to what happens in the ſtomach of the calf, as alſo in that of a child and every other animal that is fed with the mother's milk; and depends upon a *ſpecific* quality in the juices of the ſtomach capable of regularly producing it.

As this change is effected without the aid of fermentation, neither acidity nor putrefaction are the *immediate* reſult of it; and it is probable, from the appearances and qualities of children's ſtools, that, with children, only the ſlighteſt degree of fermentation follows during the *remainder* of the digeſtion; as the ſtools, when newly excreated, have their appearance of ſoft curd tinctured with bile, nearly inodorous, but which will ſoon afterwards undergo a ſpontaneous fermentation. As the particular qualities of the gaſtric juices of animals muſt vary with their ſeveral ſpecies, ſo thoſe of each may be ſuppoſed the beſt ſuited to act upon the milk of their own reſpectively: but, as it may be ſuppoſed that the component parts of milk are much the ſame in all animals, and vary only in their proportions; ſo the milk of one animal will, with a little art and aſſiſtance, be more likely to agree with another, than food of any other kind.

It is obſerved, that cows' milk ſeldom agrees ſo well, and is ſo light and eaſy of digeſtion, with grown perſons, as with children and thoſe who are younger; and, that the older a perſon grows, the leſs reliſh he has for it. From which, it is extremely probable, that as a man, or any

certaining the nature of the digeſtion of our food; and moſt of the arguments here offered are conſonant with his reaſoning and experi-

animal, advances in age, the gaſtric juices gradually and progreſſively loſe that quality which originally enabled them to act upon and promote the digeſtion of milk; for it does not appear that the ſtomach of a cow will produce the ſame change with milk, out of the body, which that of the calf does.

From this view of the digeſtion of milk, we are led to diſcover the impropriety of any food for children that differs from it. The bad effects upon the ſtomach and bowels in conſequence of the acetous fermentation from the uſe of *panada* or *pap*, or any other vegetables that require ſtrong animal powers for their digeſtion and aſſimilation, are too obvious to need a recital.

Children are always obſerved to thrive beſt when they poſſet, or throw up freely. The reaſon appears plainly to be, that as children, whether they feed themſelves from the breaſt, or are fed with a ſpoon, for the moſt part overload their ſtomachs; and the ſuperabundant food in its half-digeſted ſtate, is eaſily and readily rejected: but if the food is of ſuch a quality as is not adapted to the ſtomach, the proper digeſtion does not take place; ſo that it will lay there and oppreſs the ſtomach (as with a grown perſon ſo circumſtanced) for a much longer time, and cannot be got up without uncommon exertions and much ſtraining. It is on this account that children who are dry-nurſed, upon the *uſual* food, ſeldom or never are obſerved to *poſſet*; and therefrom ſuffer a good deal when their ſtomachs are overloaded.

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ments upon the ſubject. With reſpect to vegetables, he in general obſerves; that when they are taken alone, or even in over proportions, into the ſtomach, by the acid fermentation which they muſt neceſſarily undergo, the digeſtion is interrupted, and many complaints of the ſtomach and bowels produced; all of which are obſerved to happen the moſt remarkably with thoſe of weak ſtomachs and bowels, even of grown perſons. What effect, therefore, may a diet altogether or chiefly vegetable, and which differs ſo much from breaſt-milk, be expected to have upon the uncommonly weak and delicate ſtomachs and bowels of infants?—Certainly a very bad one. *Bread* muſt diſagree, on two accounts; as being a vegetable; and from its ſubſtance, which (as already obſerved) the ſtomach of an infant is not by nature intended, and, of courſe, prepared to receive.—*Sugar* will diſagree from its diſpoſition, as a vegetable, to turn ſour, as well as from its other unfavourable qualities.* They who

* *To the Medical Reader.*——Sir John Pringle's obſervations and experiments on the tendency and effects of *ſugar* in digeſtion, are as follow. "Nor does ſugar at all pro-"mote putrefaction. A plain ſyrup is ſaid to preſerve "meat better than any brine; and from the trials I have "made, this ſeems to be true: as alſo, that weak ſolutions "of

who are unacquainted with the properties of ſugar, cannot always be readily brought to conceive that one of the ſweeteſt things in nature will ſo readily and eaſily be converted into the directly oppoſite quality, to the taſte, of ſour; but which they will aſſent to, and be convinced of, when they reflect that it happens in the preparation of all ſorts of vinegar in which ſugar is an ingredient; and that vinegar, for ſome uſes, is made of ſugar and water only, by means of fermentation.

FROM what has been obſerved, there will not be much difficulty in accounting for the prevalence of griping with looſeneſs, &c. with infants at this period; eſpecially when it is farther conſidered how few children eſcape having food of

" of ſugar are proportionally antiſeptic. But what is moſt " remarkable here, though weak ſolutions of ſugar ſoon " yield to the putrefaction of fleſh, yet as ſoon as an acidity " is produced from the ſugar's fermenting, that putrid " tendency is either much retarded, or entirely overcome. " Wherefore in ſugar, the effects of both the *farinacia* and " ſalts ſeem to be combined; for as a ſalt, it oppoſes putre- " faction at firſt, which the *farinacia* do not; and like the " *farinacia*, it checks putrefaction after the fermentation " begins." *Obſervations on the Diſeaſes of the Army, Appendix, page* 354; *third edition.* Hence the impropriety of ſugar where an acidity is to be ſtrictly guarded againſt.

the

the quality above deſcribed forced into them in great quantities, with little intermiſſion, frequently from the moment of their birth. It is a very common practice with nurſes to feed children, at this time, when they are croſs, ſuppoſing they are hungry and want food; not knowing that they are, by ſuch means, adding fuel to the fire, and promoting the cauſe, which is no other than griping from the ſame ſort of food which they have before given. For although fretfulneſs and crying may be ſigns of hunger, yet they are not always ſo, as, an uneaſy or painful ſenſation, from griping occaſioned by cold, improper food, or any other cauſe, muſt equally occaſion them: and when a child has had as much food as is neceſſary, how great the abſurdity, how great the hardſhip upon him to be ſtuffed and gorged night and day with immoderate quantities of what, for the moſt part, is the chief or only occaſion of his uneaſineſs!—If children are not fed at all, are kept warm and dry, ſtill and quiet, and are never taken out of bed except to be dreſſed and cleaned, they will very rarely be croſs the firſt, ſecond, or third day; and, if they are, it may as reaſonably be ſuppoſed to proceed from any other cauſe as hunger. Warmth, and reſt, anſwer every intention of nouriſhment until nature requires

quires the uſe of food, and prepares the ſtomach and other organs and inſtruments of digeſtion to receive it, for that purpoſe.

THERE is yet one other argument remaining in ſupport of the impropriety of this food at this period, which is; that a child ſhall have, while he takes this food, for the firſt two, three, or four days before he gets the breaſt, a ſickneſs with or without throwing up, or a griping with looſeneſs, &c. which will diſappear totally, or in a great meaſure, by quitting this food and being fed entirely from the breaſt; and this is what happens very often, and in a very ſenſible manner, as may be obſerved by thoſe who will notice it. To what cauſes are theſe ſudden and material changes and appearances to be attributed, independent of the impropriety of the former food, and the ſalubrity and propriety of the latter? Is not this as convincing an argument as can be given, and would there need any other?

IT is of the utmoſt importance to have this ſubject properly underſtood and attended to, as the number of children who ſuffer in their health and loſe their lives by the gripes with looſeneſs, at this critical juncture, is very conſiderable; and as there is no complaint which, at this tender

age,

age, they ſuffer ſo frequently and ſo much from, and which is to be more dreaded, eſpecially with thoſe who are dry-nurſed, and are of courſe confined to it for a longer time: for although a child who is wet-nurſed may ſuffer a good deal by improper food, yet it is but for a ſhort time, and as he gets the breaſt in two or three days, the cauſe is removed, and he generally, ſooner or later, overcomes the effect of a ſhort irregularity: yet puny, weak children may, and often do, loſe their lives from it, even in that ſhort ſpace of time. But when children are dry-nurſed, and confined to ſuch like food, no wonder ſo few ſhould thrive and do well: thoſe, who live, are moſt commonly teazed with a frequent griping and looſeneſs, which keeps them always weak, puny, and ſpiritleſs, and gives them a pallid, ſickly look; and daily experience but too fully convinces us that numbers are carried off by it.

From what has been obſerved, it will appear; that children very ſeldom can have a *real* occaſion for food, of any kind, before the mother is capable of ſupplying it; and that, food (eſpecially ſuch as is commonly given upon this occaſion) is more likely to do harm than good: therefore, it will be better, in general, to avoid giving any thing as food, till the mother's or another breaſt be ready. This practice, conſidered as an innovation

vation in the eſtabliſhed cuſtom or rule of nurſing, will, no doubt, meet with oppoſition from ſome, merely on that account; it can be founded upon no other pretext, as reaſon and experience unitedly conſpire to confirm the propriety of this practice, and to place it in the moſt clear and convincing light; and which muſt have its proper weight and influence with thoſe who prefer the conviction of their own ſenſes to vulgar prejudice: yet if any doubts or objections ariſe, they will be ſolved in the beſt and moſt ſatisfactory manner by making the experiment, which, upon moſt occaſions, may be done with the utmoſt ſafety.

It ſometimes happens when a mother intends to nurſe her child herſelf that it is ſome time before ſhe can be ſatisfied whether ſhe will be able to do it or not (eſpecially of the firſt child), from the ſtate of her breaſts, the quantity of her milk, or other cauſes. It alſo may happen, that when a wet-nurſe is intended, ſhe may not be ready or at hand for a like time. In either of theſe caſes it will be neceſſary to give the child ſome food, and to continue it until the breaſt be ready: for which purpoſe, it will be adviſable and proper to make choice of ſuch food as appears to reſemble and approach the neareſt in quality to the mother's milk. *Aſſes' milk* comes

comes neareſt to the human of any we are acquainted with in uſe;* and therefore, when it can be had, is very deſirable and proper: it ſhould be given, alone, without bread, ſugar, or any thing elſe, and always as warm and freſh milked as poſſible; and the child may be conſtantly fed with it, nor will any other kind of food be neceſſary: but, as from the expence which attends it, and the conſequent difficulty of getting it, the more opulent only can be indulged with it, it will be neceſſary to ſubſtitute ſomething elſe that can be more univerſally obtained. *Cows' milk*, as being the only milk in general uſe,† muſt be had recourſe to, and will anſwer

* *Aſſes' milk* reſembles breaſt milk ſo much in taſte, conſiſtence, and every other quality, that very little, if any, difference is to be diſcovered between them. It is ſo light and eaſy of digeſtion that it is recommended to grown perſons in declines, or when the conſtitution is weakened or impaired from any cauſe; and in caſes, more particularly, where the ſtomach is too weak to retain or digeſt other food. From which, there can be little doubt that it is admirably calculated for, and adapted to, the very weak and delicate ſtomach of an infant.

† *Goats' milk* approaches ſomewhat nearer to breaſt milk than the cows' does; although it more reſembles that of the cow than of the aſs, and therefore the advantage which will

anſwer the purpoſe very well; but, as it is a good deal thicker than breaſt milk, it will be proper to reduce it to the ſame conſiſtence; and which may be done very well, and with propriety, by diluting or mixing it with water. As milk is frequently mixed with water by thoſe who ſell it, it cannot be ſaid, with any degree of exactneſs, what proportion of water muſt be added to the milk to reduce it to a ſuitable conſiſtence: but, if the milk be good, about one part milk, and two parts water,* will do very well, to

will attend its uſe cannot be expected to be *very conſiderable:* yet, when it can be conveniently had, it appears to deſerve a preference and trial, eſpecially in caſes where the cows' will not agree in any form or manner of giving it; and, when aſſes' milk cannot be obtained. The goats' milk muſt be mixed with water, in the manner hereafter deſcribed, and with a proportion of ſomewhat more than one half part water.

* *To the Medical Reader.*——According to *Hoffman*'s experiment, as upon the evaporation of cows' and human milk, the inſpiſſated reſidua were, as 13 to 8; ſo, to reduce the former to the conſiſtence of the latter, a leſs proportion than half water might ſeem ſufficient; yet, upon mixing one part milk and two parts water, the mixture ſeems, to the ſight and taſte, even then, leſs dilute than breaſt milk. As the nutritive part of milk is ſuppoſed to be chiefly confined to the unctuous and groſs; and as theſe are the moſt difficult

to give at the firſt. In mixing the milk and the water, the following directions ought to be attended to. The water that is to be put into the milk muſt have boiled,* and be of ſuch a heat when

difficult of digeſtion; there can be little doubt of its affording due nouriſhment when diluted ſo much as here directed; and the riſque of its being too groſs and heavy for a child's ſtomach will alſo, by that means, be avoided: for as it has been obſerved, in the preceding note to page 77, that the gaſtric juices of every animal may be ſuppoſed the beſt ſuited to act upon its reſpective milk; but that, by proper management, the milk of one may be adapted to another: ſo, if from the groſsneſs of cows' milk, the gaſtric juices of a child's ſtomach are not powerful enough to produce in it the neceſſary change, (there explained) by reducing it properly, that change may more reaſonably be expected. That this is not however merely hypothetical, may be gathered from what hereafter follows; where it is obſerved to be confirmed by experience, that this dilute mixture of *cows'* milk may advantageouſly be ſubſtituted for that of the *mother*; and that it, in general, will agree with infants much better than the other kinds of food with which they are uſually fed; and will be alſo ſufficiently nutritive, during the firſt month.

* It is a matter worth attending to, in preparing this, or any other kind of food for children, not to do it in a copper pan or kettle, if it can be avoided. For if any part of the tinning ſhould come off (as frequently happens), it might be a means of occaſioning very frequent, troubleſome,

when put into the milk, as, when thus mixed together, they may be as nearly of a proper warmth for the child to take as may be (viz. about the warmth of milk when it comes from the cow). It will be adviſable to mix no greater quantity at one time than it may be ſuppoſed the child will take at once. The milk ought to be as freſh milked as poſſible, and, if warm from the cow, the better: but as it can ſeldom be had warm from the cow oftener than twice a day, it may at other times be prepared from cold milk. It ought not, at any time, to be put upon the fire to warm or boil.

and even dangerous complaints in a child's ſtomach and bowels. A tea-kettle is ſuppoſed leſs liable to ſuch an accident than any other ſort, and therefore may not be thought improper to be uſed for the purpoſe of boiling the water that is mixed with the milk. However, to avoid any, the leaſt riſque, it will be adviſable to boil the water in a veſſel made of tin, in the form of a tea-kettle, panikin, &c. which will be as commodious, to the full, as a common copper tea-kettle, and preferable even to a ſilver veſſel that is not well and daily cleaned. An iron tea-kettle, that has been well and long ſeaſoned and uſed, is very proper for the purpoſe. This caution reſpecting the copper is, with children, a very neceſſary one; as, from ſuch a circumſtance, what would not ſenſibly affect a grown perſon, might, by frequent repetition, occaſion the death of an infant before the cauſe was diſcovered.

THE advantages which attend this mode of mixing the milk and water, are; that the milk, by this means, ſuffers little or no change or alteration, except being thinned, and is received by the child in a ſtate which muſt be beſt ſuited and moſt agreeable to his ſtomach: whereas, on the contrary, when milk is boiled, it ſuffers a change which makes it harder of digeſtion, to an infant, and alſo binding: warming it upon the fire, without boiling, gives it theſe qualities in a ſlighter degree: if milk is ſuffered to ſtand until it be ſo cold that the cream ſeparates, its quality is altered: if milk and water, when mixed, is ſuffered to go cold, and is warmed again once or twice, eſpecially in warm weather, it is very apt to turn ſour. From which conſiderations, it appears how neceſſary it is to conform, as near as may be, to the rules above-named; all which may readily be complied with, in part, very eaſily, upon moſt occaſions.* There will

* MANY grown up perſons who are fond of taking new milk warm from the cow, or have it recommended for the health, find it too rich, cloying, and heavy to the ſtomach, and put in brandy, or rum, to make it ſit eaſier; who, by mixing a third or half part water, that has boiled, with the milk, will find the ſame deſirable purpoſe anſwered; which will to many be a much more agreeable method;

will ſeldom or never be occaſion to put *ſugar* into this food to induce children to take it, which they will do equally as well without, if, as has been before obſerved, they have not been accuſtomed to it: and if a child is to begin with this food who has been uſed to ſugar, and refuſes to take it without, a little may be put in, which may be diminiſhed in ſo gradual a manner, that, in a little time, he may, perhaps, come to take it without any at all. *Sugar* is ſomewhat leſs injurious than *bread*; therefore it is the leſſer of the two evils.* Loaf ſugar will always be preferable to brown.

and will to all be much more eligible and expedient for the purpoſe of health in the generality of the complaints for which new milk is preſcribed. It will be a deſirable ſubſtitute for aſſes' milk when that cannot be procured. If a little ſugar will make it more palatable, it may be added. I know ſome perſons, who, when they take new milk in the ſtate it comes from the cow, find it heavy on the ſtomach; but who, when they take it mixed with a little warm water, find it perfectly light and eaſy. If a very little loaf ſugar is previouſly diſſolved in the water that is put into the milk, it takes off the rawneſs and inſipidity occaſioned by the water, and gives the milk the ſame flavour, and richneſs to the taſte, nearly, that it had before the water was put to it.

* *To the Medical Reader.*——*Sugar*, although equally diſpoſed to favour the acetous fermentation, as it muſt paſs the ſtomach much more readily than *bread*, will be leſs diſpoſed to occaſion ſickneſs, obſtruction, and oppreſſion there.

THIS

THIS LIQUOR or FOOD, thus prepared, a child may be fed with as often as feeding is neceſſary, nor will any other kind of food (if this agrees) be needful; and, from what has been obſerved, the oftener it is freſh made, the better, and which is much preferable to what is warmed over again.

CARE ſhould be taken that the milk is not adulterated with any thing that may be hurtful: chalk is ſaid to be put into the milk in London, which muſt make it very improper food for children, as chalk is powerfully binding. In this town I believe nothing but water is put into the milk, which can do it no other injury than making it poorer and thinner.

THIS is a food which can be eaſily procured by all ranks of people, and is prepared much more readily and with leſs trouble than that made in the uſual manner: it is palatable and agreeable to children, as they take it readily, and frequently with avidity and ſeeming pleaſure: and what recommends it ſtill more powerfully, is, its approaching near the quality and conſiſtence of, that natural food, the mother's milk; of which although it ſhould not be ſuppoſed to be an exact imitation, yet it appears to be nearer than any thing elſe we are acquainted with that can be generally and eaſily

obtained. It is very nouriſhing, and agreeable to the ſtomach and bowels, as appears by its ſeldom producing, or being accompanied with, any of the diſagreeable ſymptoms of griping, &c. &c. which the food, prepared with *bread* and *ſugar* (as has been obſerved) ſo very commonly does. Thoſe children who are fed with it generally poſſet nearly as regularly as they who get the breaſt only; which is what ſeldom or never happens with thoſe who are fed upon the common food with bread and ſugar:—a ſtrong proof in favour of its advantage.*

I HAVE known many inſtances of children who have been dry-nurſed, whoſe food was prepared in the uſual way, of milk, bread, and ſugar, with, and without a proportion of water in it; who, notwithſtanding repeated medical aſſiſtance, have been brought to death's door by perpetual gripings with looſeneſs and ſour, green ſtools, and who have been reſtored by confining them entirely to this ſimple food, with which, alone, they have been ſupported for ſome months, and have grown remarkably ſtrong and healthy; and when at any time, during that time, a little bread was, by accident,

* SEE the concluſion of the notes to the *Medical Reader* pages 58 and 78; as alſo the article *Sickneſs*.

or

or otherwiſe, put in the food, the diſagreeable ſymptoms as certainly recurred, and continued till the bread was again left out. When bread diſagrees with children, I frequently obſerve them to have a diſlike to the food that contains it, which they take very unwillingly, although it be made quite ſmooth; and bread of every ſort is equally diſagreeable: however, although this is commonly the caſe, yet it may, and does ſometimes happen, that a child who has been accuſtomed to have bread in his food, will not willingly take it without ſomething in it which will thicken it: when it ſo happens, a little flour may be boiled in water, and the milk added to it after it is boiled; and, as flour is rather binding, it will be an uſeful addition for the preſent; and if, hereafter, it ſhould be proper to drop it, it may, moſt likely, be done by putting in a little leſs each time the food is made, till, at laſt, it be entirely left out. Childrens food is prepared in this manner chiefly, with flour inſtead of bread, in Paris; and that, very likely, from being found to agree ſo much better, which in general it certainly does, while they are very young.

From finding, in ſo many caſes, that the milk and water prepared in this manner had ſo much the advantage of the food made in the

uſual way, I have been induced to prefer and adviſe it upon all occaſions, when a breaſt is wanting; and have repeatedly found it to anſwer moſt deſirably. However, I am but too ſenſible it is imperfect and falls ſhort of an exact imitation of breaſt-milk, and therefore of courſe may be expected, and will be found, ſometimes, inadequate to the purpoſe: yet, until ſomething elſe is diſcovered that promiſes, and is found by experience, to be better ſuited to the purpoſe, and that can be eaſily and univerſally obtained (for whatever is rare, or difficult to prepare or come at, will be far from anſwering a deſirable and general intention), it is juſtly entitled to an attention and preference.

I HAVE obſerved that ſome children, who take this food are ſometimes coſtive; and which is the only unfavourable effect I have obſerved it to produce: but as the effects of coſtiveneſs are much leſs to be feared than thoſe from looſeneſs, and as coſtiveneſs is always eaſily, readily and ſafely removed and prevented, it becomes an object of trifling importance; and if a child, who takes this food, ſhould at any time be inclined to be coſtive, a little manna, caſtor oil, magneſia, &c. (as hereafter directed, on coſtiveneſs) will always relieve it. A little chicken or veal

tea

tea* will be very proper for a child who is dry-nurſed and takes this food, and may be given now and then, occaſionally and particularly when the food ſeems to diſagree, either by cauſing a ſickneſs with or without throwing up (ſee ſickneſs); or coſtiveneſs; both which the broth or tea is, in a particular manner, calculated to relieve; and a little of this tea added

* I HAVE of late, from ſome trials that I have ſeen made, had great reaſon to ſuppoſe that the broth or tea of veal is preferable to that of chicken for children. There are two ways of making veal tea: one is, ſcraping the veal with a knife, and pouring boiling water upon it. The ſecond is, mincing a piece of raw lean veal, putting it into boiling water, and boiling it five minutes; after which it ſtands until it be cold that the ſcum and fat may be taken off; and is afterwards warmed for uſe. The latter method ſeems to be the beſt; and half a boat, or a boatful, will be ſufficient in general for a child to take in the courſe of one day. It ought to be freſh made every day; and the veal ought to be of the whiteſt kind, and newly killed.

To the Medical Reader.——It ſeems highly probable that the juices of the young of thoſe animals that feed upon milk, are more likely to prove acceptable to the ſtomach of a child, than thoſe of the animals, as the chicken, &c. that do not; or even than thoſe of the older animals, as the cow, &c. that may have formerly been fed upon milk; as the juices of young ſucking animals muſt be conſidered in a ſtate approaching nearer to milk than thoſe of other animals

added to the milk and water approaches as near to, and produces as close an imitation of, the quality of breaſt-milk (the ſweetneſs excepted) as perhaps is to be obtained by a familiar artificial compoſition: but, as preparing the tea and mixing it with the milk and water conſtantly, would, in many ſituations, be attended with trouble and difficulty, and as it is not always needful

animals that do not derive their ſupport from milk; and theſe juices, as partially extracted by ſlight boiling, appear to be no other than milk ſomewhat more elaborated, aſſimilated, or animaliſed. Theſe ſuppoſitions ſeem much ſtrengthened by the following experiments.—Three ounces of raw, lean veal, cut very ſmall, was put into a pint of boiling water, and boiled five minutes. The ſame quantity of raw, lean beef was treated in the ſame manner: as alſo a like quantity of the fleſh of a young, though full grown fowl, ſkinned. The broth (or *tea*) of theſe were ſeverally poured off from the fleſh, and, when cold, were filtered. They were then, in phials, placed in a water bath of about the warmth of animal heat, or 100 degrees of *Fahrenheit*'s thermometer. To each was put half an ounce of the infuſion of *runnet*, or *calf's ſtomach*, in water, paſſed through a rag. (The infuſion is as limpid as water). When the phials were examined an hour or two afterward, that with the veal tea had a light coloured ſediment, with diſtinct particles of the ſame matter floating in the ſtill tranſparent liquor, but which ſoon ſettled to the bottom. This matter upon a ſlight motion of the bottle floated in the

needful to be done conſtantly, a very good purpoſe will be anſwered by giving the tea now and then, when convenient, alone and by itſelf, at intervals with the milk and water; obſerving, to be more exact and careful in giving it at thoſe times the child happens to be coſtive, has a looſeneſs (as it is equally proper in both) or ſickneſs, or is any way diſordered in his ſtomach or bowels.

As

the liquor, without uniting with it, and had the appearance of a fine *curd*.—The teas of the beef and fowl remained unchanged: I therefore put to each two drams more of the infuſion of the runnet, which however in an hour or two more produced no alteration in them: two drams more were then added, when a ſediment and ſeparation took place as with the veal tea, but in a trifling and much leſs quantity. I then put in half an ounce more of the infuſion; after which the ſeparation was as copious as from the veal tea. The fowl tea was treated in exactly the ſame manner with the beef tea, and the effects produced were preciſely the ſame. The ſediment of the veal tea was very light; that of the beef leſs ſo; and that of the fowl ſtill leſs, as it had more of a mucous appearance than either of the others. None of them diſcovered any ſigns of either acidity or putrefaction, although kept many days afterward in tolerably warm weather.

From theſe experiments, it appears, that if we can admit, or ſuppoſe, that there is a ſimilarity between the juices of the ſtomach of a calf and thoſe of an infant; and it is probable

As the good or bad ſucceſs of every experiment or trial that is made muſt, upon all occaſions, depend very much upon the manner in which it is conducted: ſo, in feeding a child with the milk and water, if due care is not obſerved in the preparation and manner of mixing and giving it, it may diſagree, and become as improper as any other kind of food. The proportions of the milk and water above-named

probable they may not differ much; we may conclude, that the juices of veal, thus extracted, will be more readily acted upon by the ſtomach of a child, and conſequently eaſier of digeſtion, than thoſe of beef or even fowl. This might, however, be determined with greater certainty, where an opportunity offers of making the experiment *cum ſuccis ventriculi infantilis, extra corpus.*—The *runnet* in theſe experiments acted upon the broths in the *ſame* manner that it acts upon milk; and produced a change ſomewhat ſimilar to what happens in the ſtomach, eſpecially of an infant, that is prepared for and adapted to the digeſtion of milk, and where that digeſtion may be ſuppoſed to be accompliſhed in part and in the firſt inſtance (as obſerved in the note to page 75) without the aid of fermentation. Veal tea has too much of the animal quality in it to be the ſole food of an infant; but, on that account, appears, and is, well calculated for removing and preventing the acidities ſo frequent in dry-nurſing, when occaſionally given: the advantages that attend its partial uſe are very conſiderable; as it will act both as a curative and preventive, and alſo becomes a moſt ſuitable and deſirable food.

are,

are, one part milk, and two parts water: for if one part milk, tolerably good, and two parts water, are mixed together, they become of nearly the conſiſtence, and look like, breaſt-milk (and if properly ſweetened could ſcarcely be diſtinguiſhed from it by the taſte): ſo that theſe proportions muſt, without doubt, be the moſt ſuitable, and are the moſt likely to agree with a child at this time.

As the quality of milk varies much, it being ſometimes to be had very good, and at other times but very poor and thin, the proportioning of it with the water muſt, in ſome meaſure, be left to the diſcretion of the perſon who does it. There is a rule, however, in doing it, that ought invariably to be obſerved; which is; to be careful to make it thin enough, and not exceed the proper proportion of milk, eſpecially at the beginning and in the firſt month; for if too much milk is put in, it will make the food heavy of digeſtion, which will clog and cloy the ſtomach, and may be attended with indigeſtion; coſtiveneſs, with paſty ſtools; or a griping, with frequent ſtools, ſmall in quantity, and frequently curdled and reſembling curds and whey; or a ſickneſs and oppreſſion at the ſtomach, with, or without throwing up, but moſt commonly without (ſee the article ſickneſs).

neſs). Therefore without an exact obſervance of the rules and precautions, in mixing and giving the milk and water, as here and above deſcribed, the propoſed benefit and advantage from it muſt not be expected, cannot be obtained: for, as above obſerved, it is not the doing a thing, but the manner of doing it, that muſt enſure ſucceſs. This caution, in proportioning the milk and water, ought to be ſtricty obſerved, remembering, that it is much ſafer to be under, rather than exceed the proper quantity of the milk; for as nurſes, or thoſe who feed children, are liable to err in putting in too much milk, by way of making the food, what they ſuppoſe, *good enough*; it will happen, that to avoid the riſque of *ſtarving* them, they may literally, and as it is proverbially expreſſed, *kill them with kindneſs*. For inſtance; if a child is fed with milk as it comes from the cow, or with a third part water in it, or perhaps even one half part water, it will very likely diſagree, as will appear by ſome of the unfavourable ſymptoms, juſt mentioned, coming on; and, if conſtantly continued, may cauſe the child's death; and from which nothing can reſcue him but ſuch an uncommonly ſtrong conſtitution as falls to the lot of a very few: whereas by reducing it properly with water to ſuch a conſiſtence

ſiſtence as may adapt it to the tone, ſtrength, and powers of the ſtomach, and ſuch as it is by nature prepared and diſpoſed to receive, it may be expected, and will be found to agree with the major part of thoſe children to whom it is given.

A STATE of childhood, and a ſick-bed, are the only ſituations in life that are denied the refuſal of diſagreeable and improper things, notwithſtanding they may be called *good things*. The ſick man has little better chance of avoiding taking what he diſlikes, and is injurious to him than the infant; for, although the latter can make very little oppoſition, and is compelled to ſwallow every thing at the pleaſure of his nurſe, while his mouth can be forced open; the ſick man is in a ſituation very little better, as he is as certainly teazed into a compliance with the requeſts of his friends, by repeated petitions and entreaties. By *good things*, in the diet, is commonly underſtood, what are the moſt ſcarce, coſtly, rich, and ſtrong, of their kind: and many would ſuppoſe themſelves negligent in their duty if they did not get all the *good things*, that their addreſs or pockets could procure, for their children or ſick friends.

I CANNOT help repeatedly deploring that, upon this, as on other ſimilar occaſions, the baneful influence

influence of prejudice and cuſtom is ſo difficult to overcome, howſoever apparently advantageous the change may be in the reſult. This difficulty is chiefly ſupported and increaſed by nurſes, who, it is well known, are not "over fond" of being put out of their way, and who ſeldom, willingly, ſubmit to be directed, in ocaſions even of urgent neceſſity, if they ſuppoſe it is in a department which falls under their own immediate direction. It appears to be this jealouſy of their ſuppoſed rights and privileges that makes them ſo tenacious of them, and ſo zealous in preſerving them from infringement: or, it may ariſe from a miſtaken and falſe conception they form of their own merits in their profeſſion; in thinking, that to have occaſion to receive advice from another, will betray a want of knowledge in themſelves.* Medical men

* See page 14; where although it refers to the improper management, by nurſes, of lying-in women only, yet the cenſures there paſſed upon them are equally applicable in their conduct to infants, over whom they conſider themſelves as having entire dominion, and from whom they can meet with no reſiſtance; whereas the mothers will ſometimes, from their own opinion, confirmed by the advice they are willing to receive, conſult their own eaſe and ſafety; whilſt the poor infants, from not having the power and ability to enforce a negative, are compelled to ſubmit

men are ſeldom allowed, or as ſeldom care to interfere in this, or ſuch other like trivial matters as they have been thought (although they are really of the utmoſt conſequence); being deterred from, or deſpairing of ſucceſs in, the attempt; or, finding, perhaps, acquieſcence and compliance to be more political than an opinion urged: but, as ſuch a deportment becomes a chain thrown acroſs the road to improvement, attempts ought to be made to remove it; and

ſubmit to every thing that ignorance and bigotry impoſes upon them.

I DO not mean to apply theſe cenſures to all nurſes indiſcriminately; no doubt many have ſenſe, good-nature, and feeling enough to act otherwiſe; but as it is a picture that may be taken, but too often, from nature, I ſhould not acquit myſelf as a faithful hiſtorian, did I not draw it juſtly, and give it its proper colouring, for the purpoſe of adviſing the unwary and uninformed of what their own knowledge and experience cannot inform them. There are abuſes in every profeſſion and calling, which are (and it is proper they ſhould be as the likelieſt means of removing them) daily expoſed, which thoſe who do not merit them, although they feel the juſtneſs of the reflections, feel no reſentment at: ſo thoſe nurſes who do credit to their calling, and do *not* deſerve the cenſures here paſſed upon their profeſſion, ought not, cannot be offended at them, as the intention of ſo doing is a public good: and they who do deſerve them, may, I hope, ſee their error, and be benefited by it.

which might be done compatible with their own *real* dignity; which could not fail in the end of being acceptable to the public; and which would be more laudable and candid than ſuffering an intereſted ſervility or *falſe* dignity to preponderate againſt the calls of duty to their friends in particular, and the benefit of the community in general.

When a child is very ſmall or weak at the birth, from any cauſe, there does not appear to be any neceſſity for giving food much ſooner than if he is luſty and ſtrong; as, if what is given ſhould happen to diſagree, by bringing on a looſeneſs, or otherwiſe, the food may, in his weak ſtate, do much more harm to him, on that account, than it would to a ſtronger child; and in ſuch a caſe, it will be more adviſable to wait till the breaſt be ready, and the child able to take it: but if a child is ſo very weak, that there appears but little proſpect of his being able to take the breaſt, in a reaſonable time, it will be proper to give him ſomething; and, upon ſuch an occaſion, nothing perhaps is ſo proper as broth, which muſt be thin and weak: chicken broth, or chicken tea as it is called,* is

* Chicken tea is made by ſtripping off the ſkin of a freſh killed fowl, cutting it up the back, taking out the entrails,

is very well adapted to the purpoſe. But, from what was obſerved in the note to page 95, *veal* tea (prepared as there directed) will be preferable to that of chicken or any thing elſe. If any other kind of food may be thought neceſſary, aſſes' milk, or the milk and water, may be given at intervals; perhaps it may be full as well to give the broth and milk and water alternately and by turns. Aſſes' milk ſeems admirably calculated to this occaſion.—The following caſe, which fell under my obſervation, will explain the ſituation we are treating of.

Miss *M*——, at her birth, was remarkably ſmall, and very weakly, although at her full time: it was intended ſhe ſhould be nurſed by her mother: the common food of *panada*, or *pap*, with ſugar, and without milk, was, as uſual, given the firſt day. On the ſecond day, ſhe had

entrails, and waſhing it: it is then to be put immediately into boiling water, and boiled for about five minutes; the broth muſt be poured off, and ſuffered to ſtand till it is cold, that the fat, which may happen to be upon the ſurface, may be taken off; after which it may be warmed for uſe. But, where it is not convenient to have a freſh fowl as often as it may be needful to make freſh tea, any limb, or part of the fowl, may be cut ſmall, and boiled in the ſame manner, in a leſs quantity of water. It will be proper always to ſkin the part that is uſed.

a ſickneſs, which brought up part of what ſhe took, attended with a looſeneſs and griping: a little milk was now added to the food; the complaints continued, and on the third day the looſeneſs was increaſed, with more griping, and watry, four ſtools of a greeniſh colour. The child was now ſo weak as not to be able to take the breaſt, which was ready for her, and there ſeemed to be no probability of her living two or three hours; ſhe was accordingly given up by the nurſe and attendants. Seeing the child in this ſituation, about to expire, I deſired a little broth might be given; a little *veal* broth was very ſoon procured, and a few teaſpoonful was, with ſome difficulty, got down, which ſtaid upon the ſtomach: in a ſhort time a little more of the broth was given, which went down rather better than the firſt, and alſo ſtaid with her. The child, from this time, begun apparently to revive, and to ſhow ſigns of returning ſtrength: the broth, only, was continued all that day, and the next her complaints were much abated, and ſhe was able to ſuck a woman who had given ſuck for ſome time and was purpoſely provided, thinking her breaſts would, for that reaſon, be eaſier to draw than the mother's: the child recovered, was afterwards healthy, and throve well.

If the child, in the caſe before us, had not been fed at all with the *panada*, ſhe would not, moſt likely, have ailed any thing, nor wanted food: for if ſhe was able to ſurvive, the three days, with ſuch complaints, how much better might not ſhe be ſuppoſed to have been without them, as the food which ſhe took cannot be ſuppoſed to have afforded her any nouriſhment? —There is little doubt, from the circumſtances of this caſe, but that the *panada* was the occaſion of the ſickneſs, griping, &c. and that the child muſt have died, as great numbers do in exactly the ſame ſituation, but for that accidental trifle, the broth.

WHEN a child is intended to be dry-nurſed, the *milk and water*, prepared as directed page 85, may be begun with and given, towards the end of the ſecond day, and continued; and if he thrives well, it will be adviſable to confine him to it entirely, without giving any other food, except veal tea occaſionally and as above adviſed, for the firſt, ſecond, or third month, or until his ſtomach will bear to take it with bread in it: when that will happen, can only be known by making the experiment; as ſome will bear it much ſooner than others. There can

however be no occaſion to make trial of the bread for the firſt or ſecond month; and when, at the end of the ſecond month, if a little bread is put in, and agrees, without producing any of the diſagreeable, untoward ſymptoms of ſickneſs, griping, &c. before enumerated, it may be continued, and increaſed in proportion as it ſeems to agree. Care is neceſſary in the choice of the bread: it ſhould by all means be free from alum (which is ſometimes put into the flour to make it white), which, from its ſtrong aſtringent or binding quality, will be highly injurious: it ſhould not be too fine, nor too coarſe (although the former extreme is leſs to be avoided); the firſt, may make it binding; the latter, too looſening. The bread ſhould be made with yeaſt, without butter, or any kind of ſeeds, and very light; ſo that, when mixed in the food, it may be as ſmooth and free from lumps as poſſible; which will induce moſt children to take it better, and it will be more likely to ſit eaſy upon the ſtomach. Hard biſcuit, commonly called crackers, are ſometimes given; but they are heavy, owing to their being made without yeaſt and not fermented. Every ſort of bread made with leaven is very improper for children at any age, as it is difficult of digeſtion, and is much diſpoſed to turn ſour upon the ſtomach.—

When

When bread, of any kind, is put into the food, it ought to be boiled ſufficiently in water firſt, and the milk put to it afterwards without being boiled. When all ſorts of bread have diſagreed with a child, I have ſometimes found that a piece of upper cruſt boiled whole in water, and the water poured off clear and mixed with the milk, would agree very well. By this method much of the nutritive part of the bread is obtained, and is given to the child in ſuch a manner as muſt be moſt acceptable and beſt ſuited to his ſtomach and digeſtion.—SUGAR will always, and at every age, be better omitted; as the bad effects of it will, during the ſtate of childhood, ſtill take place: and although its uſe may not always be attended with the ſenſible bad effects of looſeneſs with ſour, green ſtools, &c. yet it may affect the digeſtion, and cauſe an acidity or ſourneſs, in ſuch a degree, without looſeneſs,* as to injure the ſtomach and bowels, and

* CHILDREN, as they grow older, generally have leſs of looſeneſs from any thing that diſagrees with the ſtomach and bowels: ſo that, at ten or twelve months a looſeneſs is not always the criterion by which we are to judge of the diſagreement of food; as ſome children at that age, or earlier, will be coſtive from the ſame cauſe which, at the birth, occaſioned a ſevere looſeneſs.

and prevent the food from affording the nouriſhment it otherwiſe would give. It vitiates the taſte; and thoſe children who are accuſtomed to it in their food, will ſeldom be brought to take any thing, willingly, that is not ſweet; which makes them nice and particular in the choice of their food.—It palls the appetite, ſo much, that a great many children who are liberally ſupplied with it have weak, bad appetites; which laſt, united with the other bad effects produced by it, muſt make them puny, and prevent their growth and thriving.—It may be ſaid that many children do well with

To the Medical Reader.——A morbid acidity in the *primæ viæ* of grown perſons, and many children turned a year old, does not always occaſion a looſeneſs; on the contrary it is often accompanied with coſtiveneſs. Its exciting a looſeneſs in the earlier periods of infancy, more than afterwards, may be owing to the extreme irritability (not morbid) of the inteſtines in children ſoon after the birth, but which ſeems gradually to leſſen as they advance in age. Therefore, in weak ſtomachs, whether of adults, or many children turned a year or two old, where the digeſtion and aſſimilation of food of an aceſcent quality is, as it muſt be, imperfect, acidity muſt and does prevail; and from the correſponding weakneſs and inertia of the inteſtines, wanting alſo the proper ſtimulus of food duly aſſimilated, their action becomes inert and languid, and their expulſive powers diminiſhed.

ſugar

ſugar in their food, and ſuffer no ſenſible inconvenience from it: ſo it may happen: but as it ſo very frequently happens otherwiſe, and may do ſome harm, although not always in the moſt ſenſible and perceptible degree, is it not better, and more eligible, to avoid the riſque of any the leaſt bad conſequence from it, by entirely omitting it; as no good or advantage can attend its uſe; and the moſt that can be ſaid in its favour, is, that it is an indulgence, and that, a needleſs one?

THERE is a machine made of horn, or tin, in uſe with many for feeding children: it is ſo contrived that the child ſucks his food from it as from a breaſt. Some children will not, without difficulty, take their food with a ſpoon or boat who will take it more readily with this machine; upon which occaſions it becomes very uſeful; otherwiſe, it has no advantage over the ſpoon. I have known ſome children who took their food very unwillingly, and were much troubled with the gripes and a looſeneſs, when fed with a ſpoon, who took it more readily with this machine, and were freer from complaint; but which I diſcovered to be owing to their diſlike and the diſagreement of bread; as thoſe children took it greedily with a ſpoon, and were well with it, when the bread was

omitted

omitted or leſſened. As a child gets his food from this machine by ſucking, he has it thinner than when fed, with the food as it is commonly prepared, with a ſpoon.

A CHILD, whatever he is fed with, ſhould never have more food forced upon him at a time than he is diſpoſed to take readily: for if he ſhould happen to overload his ſtomach, and not poſſet it up again, it will diſorder him, and he may ſuffer much from it. This ſtuffing, gorging and overloading of children with food, is an error as great and prevalent as any in nurſing. It is done with the laudable intention of promoting their haſty growth and thriving, and alſo to make them reſt better. Theſe are however miſtaken deſigns, as the contrary purpoſes are produced by them. If a child overloads his ſtomach at the breaſt (as often happens), he is relieved by poſſeting; but the poſſeting ſeldom happens with a child who is dry-nurſed, eſpecially when he gets bread; therefore, when his ſtomach is overloaded, he will ſuffer as much as a grown perſon in a like ſituation; and frequent repetitions of the practice will have the worſt (and ſometimes fatal) conſequences. See the concluſions of the notes to the Medical Reader, pages 58 and 78; and alſo the article *ſickneſs*.

As

As it ſeldom happens that a child is ſo regular in his body when dry-nurſed, as when he gets the breaſt; it will be needful to attend to that circumſtance: if he be *coſtive*, half a teaſpoonful, or more, of *manna* may be given, diſſolved in a little warm water, or in the food; and repeated as often as there is occaſion. As manna is one of the gentleſt purgatives we are acquainted with, and pleaſant to the taſte, it becomes very proper and well ſuited to this occaſion: however, if there ever ſhould be any difficulty in getting a child to take it, a teaſpoonful of caſtor oil; three or four grains of magneſia; or a little ſenna ſtewed with a few prunes,* will, any of them, anſwer the purpoſe very well, and be very ſuitable; although the effect of them will not always, perhaps, be ſo permanent and laſting as that from the manna. *Rhubarb*, is not ſo proper upon this occaſion:

* As much ſenna as can be held between the thumb and two fingers may, with three or four prunes, be ſtewed for half an hour in as much water as will leave about a ſmall teacupful of liquor, when poured clear off; of which a young child may take three or four teaſpoonful every two or three hours, until a looſe ſtool is procured.—This is more powerful than the other medicines here named, and may therefore moſt properly be given when the others fail of anſwering the intention.

for

for although it may anſwer a preſent purpoſe, by giving a ſtool or two; yet it leaves the body coſtive and bound afterwards. It is very common to give it upon this occaſion; but, for the reaſon here aſſigned, it is not a fit or deſirable medicine.*

When a child is too looſe in his body, it will be adviſable to check the looſeneſs: the means to be taken for that purpoſe are fully explained hereafter (ſee gripes and looſeneſs). A child can never be ſaid to have a looſeneſs, or ſuch a one as need be ſtopped, or even checked, while his ſtools continue of a proper conſiſtence and are not inclined to be thin and watery; as children, who have good appetites, and plenty of ſuch kind of food as agrees with them, will commonly have three, four, or more ſtools in the courſe of twenty-four hours, when in the moſt perfect health.

By a proper attention to the food, &c. children who are dry-nurſed will generally do

* Costiveness is not attended with much danger, as it can always be readily relieved, and which it ought to be, as often as it happens, by ſome of the means above-named: but if it ſhould happen that no kind of medicine can be got in, which ſeldom is the caſe, it will be neceſſary to have recourſe to a *glyſter*; which may be made of new milk, with a little brown ſugar in it, and given milk warm.

very

very well: caſes will, however, notwithſtanding every precaution, now and then happen where they will not thrive ſo well, or at all, without a breaſt: but that is never to be diſcovered until a trial of food has been made; and there ſeldom or never can be any impropriety or harm in making the experiment. The length of time proper for a trial of food to be made can no way be preciſely aſcertained or limited in this place, but muſt depend entirely upon the circumſtances of the child's health and ſtrength. When a child is, at his birth, weak, or ſickly from any cauſe, ſuch as, being born before he is at the full time; from being weak and puny when born, although at the full time; or, from a diſeaſe which he may happen to labour under, as a looſeneſs, &c; three or four days or a week may be as long as it will be prudent or adviſable to make the trial, if it appears not to agree. But when a child is, at his birth, healthy, and has ſtrength, the trial of food may continue a week, or a fortnight, or even three weeks: a longer delay, in either of theſe caſes, may, if the food does not agree, ſo far reduce the child as to riſque his life; and may alſo prevent his taking to the breaſt afterward. If the food agrees the firſt, ſecond, third, and fourth

weeks,

weeks, it may be reaſonably expected to do ſo ever afterward.

Before I entirely quit this ſubject of diet, it may not be amiſs to remark, that ſhould it be ſaid, many children do well with dry-nurſing upon the uſual food, and therefore there is no occaſion to alter it: I do not heſitate in acknowledging, that ſuch inſtances are to be met with; yet cannot allow them to be common, or frequent; on the contrary, they are, by daily experience, proved to be very rare. I have no doubt, in declaring, as I do it from experience, that food, prepared in the manner here recommended, has greatly the advantage of that made in the uſual way; and that many children will do very well, in dry-nurſing, with this, who will not do at all with the other; as many, whoſe lives have been in imminent danger from its effects, have been reſtored by this, with little, and often no other kind of aſſiſtance. Thoſe who, from prejudice, or any other cauſe may ſtill be inclined to favour the uſual mode, may, when that appears not to anſwer their wiſhes, be induced to vary it, by adopting and making trial of this: it has ſome qualities which will always encourage and promote its uſe; which are; that it is ſimple, and eaſily tried; it cannot poſſibly be attended with the leaſt bad conſequence;

quence; and, it may be ſafely declined at any time if it ſhould not anſwer.

THERE will ſeldom be any occaſion to vary or alter the proportion of the milk and water, if it agrees with a child, the firſt month. In the ſecond month however, if a child thrives, and is luſty and ſtrong, the water may be decreaſed, from two parts, to one half, or nearly ſo; which will make the food half milk and half water: it will be adviſable, at all times, to be careful not to put in too much milk, which may make it heavy of digeſtion, and may, as has been already obſerved (page 99), clog and cloy the ſtomach, which will be attended with diſagreeable conſequences (ſee ſickneſs); whereas a trifling error in the over proportion of water can do no harm, and which makes it the ſafer ſide to incline to.

THERE is oftentimes a good deal of difficulty in getting children to take the breaſt, and which may happen from different cauſes; the moſt common ſeems to be, bad nipples; which, from their ſmallneſs, or unfavourable ſhape, a child cannot eaſily take hold of: in which caſe they muſt be well and frequently drawn by an older child, or the mouth of a grown perſon;

or

or by a glaſs: but the mouth does it moſt effectually, and is to be preferred. Sometimes the breaſts are ſo ſwelled and diſtended as to bury the nipples; and if the nipples are even eaſy to take hold of, yet the breaſts, in that ſituation, are oftentimes hard and difficult to draw: upon this occaſion the breaſts muſt be repeatedly drawn until they be ſoftened. The breaſts of ſome are much eaſier to draw than thoſe of others; and it is very uſual for one breaſt to be eaſier to draw than the other, of the ſame perſon.

The liking that children ſometimes take to one breaſt more than the other, is not eaſily accounted for; as, it often happens, that they repeatedly refuſe one, and cannot be even brought to take hold of the nipple by any means or pains that can be taken with them for that purpoſe. Some refuſe attempting to take hold of either of the nipples of one perſon, who will readily catch at both the nipples of another: but when this happens, it is commonly the mother's breaſts that are refuſed, and thoſe of another perſon, who has been a nurſe ſome time, that will be accepted: by which it may be reaſonably concluded, that a child's objection to taking one or both of his mother's breaſts may be owing to their not having been drawn before by a child; and that there is a particular

flavour

flavour or ſomething in the touch or feel that is communicated to the nipples by the ſucking of one child, that induces another ſo readily to follow him; as the ſame diſlike and refuſal will frequently continue although the breaſts have been repeatedly drawn by a grown perſon. Therefore when the child's refuſal of one or both breaſts continues, ſome time, it will be adviſable to get another child to draw them a few times.

This difficulty, which now and then happens, of getting a child to take the breaſt freely, ſometimes becomes a cauſe of uneaſineſs to the mother; and her anxiety and pains to accompliſh it makes her hurry and fatigue herſelf more than, at this time, is conſiſtent and adviſable, and ſhe needs do: for ſhe may be ſatisfied that, although he may not at firſt readily take to the breaſt, yet there can be little doubt that he will take it in a little time: ſhe may alſo be aſſured, that if he will take one breaſt, he will be brought to take the other, although he refuſes it for the preſent; and ſhe muſt not give it up, but have the breaſt drawn, two, or three times a day, to preſerve the ſuck in it, which might otherwiſe go away. And ſhe may likewiſe be as well aſſured, that although the child for ſome time perſiſts in refuſing both

her breaſts, yet if he will ſuck thoſe of another perſon, he will as certainly be brought to take hers when they have been properly drawn by a grown perſon, or, particularly, by another child, as above mentioned.

A CHILD's being tongue-tied will impede and hinder his ſucking freely; when that happens, he may be obſerved to loſe his hold very often, and, when he draws the breaſt, he frequently makes a chucking noiſe. Upon this occaſion the mouth muſt be examined, and the tongue ſet at liberty, by cutting a ligament or ſtring* which will be found to confine the tongue down to the lower part of the mouth; and which is done by the ſurgeon with little or no pain to the child, who will commonly take the breaſt immediately after the operation without any farther inconvenience to him; and there never is any danger to be apprehended from bleeding, or any other conſequence of the operation.

AMONG the number of cauſes, that of a want of milk or where there is but little, is not, when it happens, the leaſt frequent; as a child will ſeldom take much pains when the reward

* DR. YOUNG of Edinburgh invented an inſtrument on purpoſe for performing this operation, and which is admirably well calculated for it.

of

of his labour is trifling and unſatisfactory.—If a child is put to the breaſt the firſt or ſecond day, he may not, if he is a weak child, have ſtrength enough to ſuck, eſpecially if the nipples and breaſts be unfavourable, and which they very frequently are until they have been once or twice drawn.—Some children ſeem, without any apparent cauſe, naturally diſpoſed to ſuck much better than others. It might be ſuppoſed, as ſucking is the moſt particularly inſtinctive action of any we are capable of, and ſo eſſential at that age, that few or no children would be defective in it; yet ſome are very ſhy about beginning, and are never very perfect at it. A caſe fell under my obſervation of a child, who in every reſpect was perfectly formed, and was remarkably ſtout and healthy, who never ſhewed the leaſt inclination or diſpoſition to ſuck, notwithſtanding every means that could be thought of, to induce him to it, was tried.

WHEN the mother or nurſe has milk enough to ſatisfy the child, there can be no doubt that it will be beſt to confine him entirely to the breaſt, as no other kind of food is ſo proper, and whatever elſe is given may happen to diſagree: but, if by accident (as it may, and often

does happen that) from indiſpoſition of the nurſe, or child, there may be at any time a neceſſity to give the child medicines, or to wean him either totally, or in part, there will be often a great deal of difficulty in getting him to take food or medicine, if he has not been accuſtomed to a ſpoon. To make feeding with a ſpoon, or boat, therefore familiar to the child, in caſe there ſhould be a neceſſity for it, it will be very adviſable to accuſtom him now and then to take a little food. Aſſes' milk, or milk and water, will be the moſt proper for this purpoſe.

When the mother, or nurſe, has not milk enough to ſatisfy the child, he may be fed at intervals, as often as there is occaſion, with aſſes' milk, or milk and water, to ſupply the defect.*

It is a cuſtom with ſome, or rather in ſome places, to endeavour to confine children to regular times of feeding, either with the breaſt, or a ſpoon; which is very deſirable to the nurſe, as it makes it very comfortable, eaſy, and often

* I have ſeen children that would not be contented and ſatisfied with ſuck alone (although they got plenty of it), without being fed with other food, as they clearly expreſſed by their reſtleſſneſs until they conſtantly got it: but this has *always* happened with children that were uncommonly ſtrong and luſty, and is a rare and ſingular occurrence.

convenient

convenient to her, and is no disadvantage to the child when it can be accomplished, and which it sometimes may with quiet, healthy children; but it is done with difficulty with those who are cross from any cause.

Of Air, Exercise, and Washing.

IT has been already observed (see pages 45 and 48) that a state of *rest* and *quiet* during the first month is proper and necessary for an infant; as, likewise, *warmth:* yet although they are, at that period, so essential, they must not, hereafter, be so much and so constantly indulged, but must be declined at a proper season, and by suitable degrees. It is scarcely possible to fix the exact times when these changes are to take place, as so much must depend upon seasons, and childrens health and constitutions: however, we may venture to repeat the propriety of enjoining rest and warmth, as most safe and advisable during the first month, in all situations, and upon every occasion.

AT the expiration of the month, if the weather be moderately warm, the child may be taken from his own room into any part of the

house; taking care that every part of the body and limbs be well wrapped and defended from the cold, except the face; whereby he will have the benefit of breathing the fresh air, without much risque of taking cold, which children are very subject to do upon their first going out, and which appears by a sneezing, a stuffing in the nose, a cough, or griping and looseness.

At this time a little exercise may be given by a gentle and even motion of the nurse's arms, increasing it by degrees, that the child may gradually get quit of the apprehension and fear which infants so sensibly show at quick motion. If there is no real necessity for the child's going out of doors, it will be better to pursue this plan within doors the greatest part of the second month, adding a little, by degrees, to his exposure to the air, and his exercise, during that time. Towards the expiration of the second month, if it be in summer, and dry weather, the little stranger may be ushered into the open air, to acquire, by slow degrees, a familiarity with every thing he will, in the common course of nature, have to encounter.—If it should be in winter, or a cold season, it will be much better to keep the house until the weather becomes milder and more favourable; as the risque of cold will overbalance every prospect

of

of advantage that can be expected from going out in a rigorous, unfavourable season.

The exercise in the arms may now be increased, and which the child will by degrees seem to relish and be fond of: but there is a caution, in doing it, which ought to be particularly attended to: many nurses have a habit of laying children across the lap; and, by the motion of the knee, to shake them, and that sometimes violently, and even so as to make them rebound from the knee; which is done with a view of quieting them when they are cross; and, sometimes, for pastime. This practice, from what has been observed, with very young children, in the month especially, is far from being consistent and right: it will undoubtedly quiet a cross child *sometimes*; but which is effected by a lesser pain being removed by a greater; which surely can be no recommendation to it. I have been witness to the bad effects of this violent agitation and concussion, where very alarming symptoms were produced by them: and I have no doubt, where they are practised, children suffer very frequently when the cause is not known nor suspected. The symptoms which I have observed to happen, in consequence of this practice, were, a sickness, and uneasy breathing, with a constant moaning and

complaining, as if there was a fixed pain in ſome part; ſometimes a coſtiveneſs. I have alſo obſerved it to occaſion a ſtarting and enlargement of the navel. As this practice is liable to be attended with much danger, it is better entirely omitted: as much exerciſe as is wanted may be given in the arms, which is the moſt ſuitable method.

The nurſe or ſervant who carries a child about, ought to be careful to change arms; that is, to carry the child ſometimes in one arm, ſometimes in the other; and which they will ſeldom attend to without frequent admonition, as one arm becomes more familiar and eaſy to them than the other: a nurſe who gives ſuck with one breaſt only, will be very liable to do ſo.—This is not a needleſs or trifling precaution, as a child may very eaſily become crooked by being confined to one poſition, eſpecially upon one ſide. Some nurſes, through indolence, have a habit of carrying a child under the arm, as it is called, and which they do, by reſting the hand upon the hip, and carrying or ſlinging the child acroſs the arm.—Children frequently become crooked with careleſs nurſes, eſpecially thoſe who are puny and inactive, from theſe cauſes; and if they eſcape a diſtortion of the ſhoulder or back, one of the hips is often flattened and made

made lower than the other by conſtant preſſure upon the ſame part in one poſition; and although it may not occaſion or ſhow much deformity in men; yet in the other ſex it is, from their manner of dreſſing, very plainly diſcovered to injure the ſhape, and may be hurtful in other reſpects. Young girls are not very proper to be entruſted with the exerciſe of a child, as they are ſeldom ſo careful and diligent as they ought to be, and often have not ſtrength ſufficient for a ſtout, active child, and one who is about getting to his feet.

CRADLES, are uſed ſometimes for the ſake of the exerciſe they afford; but much oftener for convenience. This mode of exerciſe, however, has its improprieties, and ſome diſadvantages attend it which ſeem to overbalance the ſuppoſed benefit from exerciſe; and theſe are: a cradle can ſcarcely be ever ſo regularly warm as a common bed, and an air is produced by rocking: there is an impropriety in the *motion* of a cradle in the firſt, ſecond, or third week: thoſe children who are rocked in the day will ſeldom ſleep well in bed at nights, and ſome will not reſt at all except they are kept in the cradle in the night to be rocked occaſionally. *Cradles*, when conſidered altogether with reſpect to the advantages to be derived from the exerciſe they afford, become

come needleſs, when as much exerciſe (and of a more ſuitable kind) may be given in the nurſe's arms in the day as will be quite ſufficient: exerciſe, alſo, ſeems more proper awake than ſleeping. Theſe arguments, independent of the inconvenience of a cradle where there is not a proper nurſery, will outweigh every other benefit. If it ſhould be ſaid, that cradles are ſometimes found neceſſary to quiet croſs children; it may be obſerved, that as cuſtom is very prevalent, ſo, if ſome pains is taken with a croſs child to get him to reſt quietly in bed without rocking, it is worth while, for the reaſons now offered, to be at ſome little pains in making the experiment; when, if it ſhould not anſwer, the cradle may be had recourſe to as the *dernier* or laſt reſort: but, when a child has once been accuſtomed to a cradle, it will be a difficult, not to ſay impracticable, taſk to wean him from it, whatever may be the neceſſity of ſo doing.—It may be obſerved, that children who have not been accuſtomed to a cradle, will generally reſt as well without, as with one.

The regular and conſtant warmth that was ſo eſſentially neceſſary for children, both in and out of bed, the firſt and even ſecond month, will become leſs ſo hereafter; and it is proper they ſhould be gradually accuſtomed to be kept cooler;

cooler; but the degrees by which this is to be done muſt depend ſo much upon the childrens health and conſtitutions, the ſeaſon of the year, and other circumſtances, that it cannot be, here, determined how, when, and by what degrees it is to take place: however, there is no doubt, when all circumſtances favour it, that a child's ſleeping in a *crib*, or any other contrivance of the like kind, and by himſelf, is preferable to being in a bed, and with another perſon; and when he begins this practice, he ought to continue it conſtantly, and regularly, in all ſeaſons, and upon all occaſions: a mattreſs is to be preferred to a feather bed. This practice is ſcarcely ever adviſable earlier than the third or fourth month although all circumſtances ſhould favour it: after that time, it may be begun with whenever it ſeems ſuitable, and when the child can be brought to take to it.

Washing with *cold* water, every morning previous to dreſſing, is very conducive to health: it acts as a general bracer and ſtrengthener. This waſhing ought to be (as it generally is) practiſed from the birth. For the firſt three or four days, or a week, it will be better to have the water a little warm, to prevent the child's taking cold: the warmth of the water may be gradually and daily leſſened; ſo that at the expiration

piration of the firſt or ſecond week it may be quite cold; and in this ſtate muſt, with the hand, be poured freely and copiouſly upon every part of the body, ſo as to anſwer the purpoſe of bathing. There may be ſeemingly a hardſhip and ſeverity in this mode; but which cuſtom ſoon reconciles, and makes ſo familiar, that the children do not ſeem ſenſibly affected by the ſhock, when it is done conſtantly, completely, and without intermiſſion; for if it is done only now and then, or imperfectly, it will be the greater hardſhip when it comes again to be done completely: nurſes or ſervants will ſometimes, from indolence, or a miſtaken lenity, neglect it, and therefore ought to be now and then looked after. It is ſcarcely neceſſary to obſerve that the child ought to be wiped dry after waſhing, before he be dreſſed: the rubbing of the body and limbs with a towel, is conducive to health, as it is a good and ſuitable exerciſe.

VERY few of the complaints to which children are liable will forbid this practice of daily waſhing with cold water, except when they are uncommonly ſevere and in the extreme: perhaps, the peripneumony or aſthmatic affection (hereafter treated of) is the only one wherein it may be improper, as cold bathing is found not to agree with complaints upon the lungs; therefore,

fore, upon such an occasion, the water may be warmed.

Cold bathing, or washing, is of the utmost service to children, particularly those who are puny and weakly, and which nothing can exceed or equal as a bracer and strengthener: it ought not to be omitted with those who are healthy, strong, and thriving: it will, with all, be a means of encouraging and promoting health and strength, and of preventing many complaints which, from weak habits and constitutions, children may be liable to: it ought to be practised, without interruption, in all seasons, and may be continued for some years with great advantage.

Of a hired Wet-Nurse: her Diet, Exercise, &c.

A FEW cautions are proper to be observed in the choice of a hired wet-nurse, in large towns, more especially, for very obvious reasons.

The first enquiry very generally and properly made, is, her general as well as private character, from some persons of character; by which it may be known whether she and her husband, if

if ſhe be a married woman, are ſober, virtuous people, or bear ſuch a general good character. She ought to be healthy, and free from any particular hereditary or family complaint: great care ſhould be taken to avoid a nurſe who is conſumptive; as there appears to be a greater riſque of a child's imbibing that diſeaſe, than any other the human body is *naturally* liable to. A woman is to be preferred who has had more than one child; as, on that account, ſhe will, moſt likely, have a greater flow of milk, and, that, of longer continuance. A woman who has had more than one child will be better qualified by experience to take care of a child. The number of children ſhe may have had is not of much importance, provided her conſtitution is good and not impaired by it: no doubt, a young woman is to be preferred, when ſhe is in other reſpects ſuitable and qualified.—A very material circumſtance to be attended to in the choice of a nurſe is, that ſhe has plenty of milk; to diſcover which, it will be neceſſary, ſometimes, to ſee her more than once; as ſhe may have more milk at one time than another; and which may happen either by accident or deceit; as it is not uncommon to find nurſes who will retain their milk for ſome time before they offer themſelves, that they may appear to

have

have a great deal. Children often suffer considerably when they have not plenty of suck, as it subjects them to be fed with whatever the nurse may be disposed to give them, and which cannot always be readily discovered when they are nursed from home.* A nurse ought to give suck with both breasts.†

Good

* As it seldom happens that children have justice done them when either wet or dry-nursed from home; it will be advisable, if possible, to have them at no greater distance than where they may be often seen; which may keep the nurse upon her guard constantly, and be a means of preventing any negligence on her part: this will be always advisable, except upon particular occasions, and where the fullest faith and confidence can be placed in the nurse, from former experience. This negligence of hired nurses has long been a subject of complaint. A physician of great eminence, who lived in the reign of king *William* and queen *Mary*, and who attended the persons of their Majesties, in a treatise of the diseases of children, when speaking of the neglect of nurses in the neighbourhood of *London*, says: "To the same causes was owing an obser-"vation which was made not long ago by a worthy divine, "rector of a parish twelve miles from *London*, who with "great grief of mind told me seriously, that in his parish, "which was not either small in its bounds or number of "inhabitants, and was situated in a very wholesome air, "was, when he first came to it, filled with sucking infants" from

† See page 126.

Good nipples are very deſirable, as they enable a child to ſuck with much eaſe and advantage to himſelf. Care muſt be taken that the nurſe does not give ſuck to her own child after this time; and that (to prevent it) he be entirely weaned, or put to nurſe with another perſon; as very few women can have milk ſufficient for two children, or attend them in other reſpects as they ought to do. Country women are to be preferred, as not only being healthier than thoſe in towns, from their diet and regular manner of living; but, from being much more likely to have plenty of milk. The ſooner a nurſe is had after her lying-in, the better; as her milk will then be in the greateſt quantity, and likely to continue plentiful for a ſufficient time. A circumſtance not always attended to in a nurſe, is, her diſpoſition and

from *London*, "and yet, in the ſpace of one year, that he "buried them all except two, and one of his own, who, "being weakly, he had committed to my care from his "very birth; and that the ſame number of ſmall infants "being ſoon twice ſupplied, according to the uſual cuſtom "with hireling nurſes, from the very great and almoſt "inexhauſtible city, he had committed them all to their "parent earth in the very ſame year." *Dr. Harris's Treatiſe on the Diſeaſes of Children, tranſlated by John Martyn, F. R. S.*

temper

temper of mind; which ought to be mild, and not ſubject to be agitated by ſtrong paſſions. It is commonly, and very juſtly obſerved, that grief has a ſenſible effect upon the milk, in cauſing it to diſagree with a child: a haſtineſs of temper, accompanied with rage and paſſion, will produce the ſame effect. This is eaſily accounted for; as nothing more readily and ſenſibly affects the ſecretions than ſtrong paſſion from grief, rage, or any other cauſe: the milk therefore, as being a ſecretion, muſt, and does, ſuffer in ſuch a manner as to produce an apparent bad effect upon a child who takes it ſo circumſtanced. A woman of good temper is alſo to be wiſhed for, as ſhe will be likely to be careful of the child.

The nurſe's own child at her breaſt will afford the beſt proof, and will be the beſt ſpecimen of her abilities, care and attention as a nurſe. If he is thriving, and looks healthy and well, it is a ſtrong argument in her favour; and it may with great certainty be determined that ſhe has plenty of ſuck, and that ſhe does her duty to him, in other reſpects, properly. If ſhe has other children that are older, it will be ſtill a greater ſatisfaction if they appear healthy.—On the contrary, if the child at her breaſt is weak and puny, and does not appear to thrive well;

there is great room for ſuſpicion that the mother is not healthy, or that ſhe wants ſuck or ſome other requiſite eſſential to a good nurſe; except, that the child's appearance can be very ſatisfactorily accounted for from ſome preſent, occaſional and accidental indiſpoſition, independent of what may juſtly be ſuppoſed to be occaſioned by, or proceed from, the mother's nurſing.

THE DIET of a nurſe ought to be plain, ſimple, and light of digeſtion; and chiefly of the vegetable kind: broth, or a little fleſh-meat, to thoſe who have been accuſtomed to them, are proper occaſionally, but ſhould not be too much indulged in; they muſt be free from high ſeaſoning of pepper, ſalt, or any thing elſe of the kind. Good table beer (as it is called) for common drink, and a little ale, or porter, proportioned to the nurſe's conſtitution and what ſhe has been accuſtomed to, are very proper. Butter-milk and cheeſe-whey, in the ſummer ſeaſon, or when they can be had freſh and ſweet, and agree without cauſing a griping or looſeneſs, and ſit eaſy upon the ſtomach, may be indulged in by thoſe who are fond of them, as they are not to be exceeded, or, perhaps, equalled by any other food upon this occaſion, where they agree. *Spirituous liquors*, or *wine* of any ſort, are upon no occaſion neceſſary to be repeatedly given

given in a ſtate of health; but, on the contrary, are very improper, and may be highly injurious: for if a nurſe is ſuffered to have them at her pleaſure, or very frequently, ſhe may take ſuch a liking to them as will endanger the child's health. It will therefore be moſt adviſable never to offer them, except in caſes of real ſickneſs, or a glaſs of wine now and then to a nurſe, who may, in the common courſe of her life, have been accuſtomed to it.

It muſt be obſerved, that this regimen or form of diet is meant as applicable and ſuited to the expectations and conſtitutions of thoſe in general, who, from their ſituations and circumſtances in life, engage in the office of nurſing: it might, however, be copied and attended to by thoſe in more elevated ſituations, who nurſe their children themſelves; as it is treading in the footſteps of nature, our beſt guide, and is a copy of what is practiſed in country places; where an uninterrupted glow of health diffuſes itſelf throughout whole families, and pervades even the meaneſt cottage; and where nature enjoys her fulleſt ſcope, is leaſt reſtrained, and will be found commonly to have moſt liberally beſtowed her own gifts. Thoſe in advanced and diſtinguiſhed ſtations, who, from the prejudices of education and cuſtom, are not led to

attend to and copy nature and the beauties of native ſimplicity, ſeem ſtudiouſly to avoid what are called the ordinary forms of conduct upon this, as upon moſt other occaſions; but which they would much ſeldomer do, for their own ſakes, if they would ſuffer the dictates of reaſon to prevail over faſhion or caprice; conſidering, and remembering; that human nature, whatever forms may, by artifice, be obtruded upon her, and ſhe compelled to aſſume, to enlarge or contract her bias and inclination, can never be made eventually to deviate, without manifeſt injury to herſelf, from the ſtation and bounds unalterably impoſed upon her by the unerring Powers which firſt created and gave her laws.

Exercise, in a moderate degree, will be very beneficial, and will aſſiſt a good deal in increaſing the milk: gentle walking; riding in a carriage, or more particularly on horſeback; will, all, as convenience ſuits, be proper: but, in all kinds of exerciſe, particular care muſt be taken that ſhe does not overheat herſelf, as it would have a bad effect upon her milk.

If a nurſe proves to have a weak conſtitution, or loſes her ſtrength, or if her milk becomes impaired; cold bathing, eſpecially in the ſea, when the ſeaſon will admit of it, is often found particularly uſeful in reſtoring the ſtrength and increaſing the milk: it never can do any harm

to

to a woman, merely as a nurſe and except ſome other reaſon, independent of that ſituation, forbids it. As bathing is generally improper for conſumptive perſons, ſhe ſhould not be permitted to do it, if in that ſituation, without proper advice. She may ſafely begin to bathe at the end of the ſecond month from the time of her delivery. See the article cold bathing.

Of the DISEASES *of* NEW-BORN CHILDREN.

Swelling upon the Head.

A SWELLING about the ſize of an egg, but of a round form, will ſometimes be obſerved, ſoon after the birth, upon the crown of the head: it is ſeldom that any thing is neceſſary to be done for the removal of it, as it commonly by degrees leſſens and entirely diſappears in a few days, of itſelf: however, that does not always happen, as it will ſometimes remain ſome weeks without much viſible alteration; in which caſe, a piece of thin ſheet lead, or ſuch as the India tea-cheſts are lined with, big enough to cover the ſwelling, folded in a

linen rag, and kept conſtantly upon the part, will generally reduce it in a ſhort time; although it ſometimes proves ſtubborn; yet, by continuing the lead, it will yield in time. No attempts ſhould ever be made by poultices (as is ſometimes done) to bring the ſwelling to a head, or gathering, by way of diſcharging any matter which may be vainly ſuppoſed to be contained in it; nor ſhould any other means be uſed to open the ſwelling, which moſt likely would be attended with the moſt immediately fatal conſequences. It happens moſt frequently of the firſt child; ſeldom afterwards.

Tongue-tied.

THIS has been noticed before (ſee page 120).

Of the Navel.

THE navel ſtring generally comes off about the ſixth day; and if it ſhould remain longer, nothing muſt be done to bring it away before it will come of itſelf. Nothing particular need be applied after it is come away.—If a ſwelling or fulneſs about the navel is at any time obſerved, the roller, commonly called the belly-roller, may be made a very little tighter than uſual;

uſual; and if the ſwelling ſhould continue, or increaſe, it will be adviſable to get proper aſſiſtance to it; otherwiſe, from delay, a rupture may be formed, which may be troubleſome for life; although it is what very rarely happens. I have known a piece of thin ſheet or tea-cheſt lead, applied in the manner above-mentioned to the ſwelling upon the head, to aſſiſt greatly in reducing this ſwelling; but it muſt be worn conſtantly, and for ſome time, to produce any conſiderable effect.

Sore Eyes.

CHILDREN are ſometimes, a few days after their birth, obſerved to have a ſwelling upon one or both eyes, and which are ſo gummed up that a child is ſcarcely able to open them. This however is not a complaint in the eye itſelf, but in the eye-lids, which appear ſwelled and a little inflamed. This complaint will generally go off of itſelf in a few days; however, if it does not, it will be proper to bathe the eye or eyes with a little lime water, twice or thrice a day, by means of a ſoft linen rag. If, in the courſe of a few days, the complaint does not go off by this means, it will, almoſt certainly, by the following.

TAKE two grains of white vitriol, diſſolve it in an ounce, or two tableſpoonful, of pure water: with this bathe the eye, or eyes, as above directed. It rarely happens that the complaint attacks both eyes. This complaint is not attended with any laſting or bad conſequences; and commonly goes off readily.

Gripes, with, and without Looſeneſs.

THE GRIPES is a complaint from which few children are exempt, in ſome degree; and it is the moſt troubleſome, in general, they are ſubject to: they are liable to it at all periods of infancy; but more particularly ſo in the early ones; when it is often very troubleſome and diſtreſſing.

Cauſes of the Gripes.

THE general cauſes of griping do not exceed three* in number.

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* THERE are other cauſes of griping; as, a diſeaſe in the conſtitution in general, or in a particular part of the body, which, however, rarely happens ſo early in infancy: and, it may be epidemic; that is, prevailing in the town or neighbourhood, depending upon the ſeaſon of the year, or

THE firſt, is a *Natural Weakneſs* of the *Conſtitution*, or a particular *irritable* or *tender* ſtate of the *Stomach* or *Bowels*.

THE ſecond, COLD.

AND the third, IMPROPER FOOD.

TO ſome one, or more, of theſe cauſes, may the complaint be generally aſcribed: any of them, ſingly, are ſufficient to produce it: but two, or all of them, may unitedly conſpire to do it; upon which occaſion it may be expected to be more ſevere and violent.

A *weakneſs* of *conſtitution*, and of the *ſtomach* and *bowels*, ſo general in infancy, ſeems to be the greateſt and original cauſe; the others being leſſer cauſes, depending upon, governed by, and ſubordinate to the firſt, without which they would ſeldomer act.

COLD, it is well known, is a very common cauſe of griping with grown up perſons who

or ſome infectious cauſe; when it is generally accompanied with a ſevere looſeneſs, and is moſt common in the autumn months.—But theſe, and ſome others, that, to avoid confuſion, are here full as well unnamed, are to be conſidered as only occaſional and accidental, and cannot be numbered with the general cauſes.—The *Thruſh*, *Frogg*, or *ſore Mouth*, as it is variouſly called, which, as when it is in the extreme, will occaſion a ſevere griping and looſeneſs, is to be numbered with the occaſional cauſes of griping.

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have weak bowels (and numbers are ſo circumſtanced): no wonder then if it affects children, in that way, in a particular manner, whoſe bowels are naturally weak and tender at that age; and few children eſcape a griping when they take cold.

Of all the cauſes of griping in the firſt periods of infancy, *improper food* is the moſt common and frequent.—A griping which is occaſioned by *cold*, or any other cauſe, may be ſuppoſed to happen by accident, and only now and then: but when *improper food* is given, the ſame is generally repeated daily, and without change or variation; whereby the complaint is conſtantly ſupported, and continued without intermiſſion; which makes this, when it happens, the cauſe of frequent griping: it may alſo be juſtly ſaid to be the moſt common; as, in dry-nurſing, not one child in twenty has proper food, or ſuch as agrees with him, given him: and a leſs proportion of thoſe who get the breaſt eſcape having improper food, or ſuch as diſagrees with them, forced upon them a few days previous to their getting the breaſt; during which time, although it be but ſhort, the injury done is oftentimes conſiderable; ſometimes irreparable. See page 82.

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THE mother's or nurſe's milk is liable to be affected by many cauſes; ſuch as, a diſeaſe of any kind, improper food, grief or any other paſſion of the mind, &c. (ſee page 134) ſo as to make it diſagree with a child, and cauſe a griping: and although this milk cannot literally be called improper food, yet it is to be conſidered as food in an improper ſtate, and, conſequently, ſubject to a like acceptation with improper food of any kind. I have known a very troubleſome and obſtinate griping and looſeneſs brought on by a child's ſucking a nipple which had been bathed with lead water for the purpoſe of healing and ſkinning the nipple.

THAT improper food is the moſt common cauſe of frequent and troubleſome griping, appears by what has already been obſerved in the article of FOOD;* and has been there ſo fully ſpoken of as to render a repetition, in this place, unneceſſary.—Children who are wet-nurſed are not ſubject to ſuch frequent and ſevere fits of griping as thoſe who are dry-nurſed, on account of the food.

* Page 59 and following.

Symptoms

Symptoms of Griping.

When a child is croſs and fretful, it is very common to ſuppoſe he is griped, eſpecially when no other reaſon can be apparently aſſigned for his uneaſineſs: but it is not very uncommon with ſome children to be frequently very croſs without being griped, or ailing any thing elſe, and who are very healthy and thrive well; which cannot be accounted for any other way, than, that it is their natural diſpoſition to be ſo.

The moſt certain and unerring ſigns of griping are; a coſtiveneſs; or a looſeneſs with watery or thin ſtools of a ſour ſmell and green colour, ſlimy, or curdled, commonly, although not always, attended with a hardneſs or ſwelling of the belly: ſudden fits of crying when aſleep, and at other times, with a drawing up of the knees towards the belly. When any one or more of theſe ſymptoms jointly or ſeparately occur, there can be little doubt that the complaint is the gripes. But when the ſtools are of a natural colour and conſiſtence, without being coſtive; or diſpoſed to be thin, ſour, ſlimy, curdled, or of a green colour; and unaccompanied with any of the other ſymptoms here enumerated; it may be concluded, with a certainty,

tainty, that the gripes makes no part of the child's complaint. As a looſeneſs is one of the moſt conſtant and regular attendants upon griping, it will be proper to obſerve, that there are many degrees of it: ſometimes, eſpecially at the beginning, it will be very ſlight, ſo that the ſtools will not be much more frequent than uſual, nor much thinner, nor altered in their colour, or ſmell; which may be called the firſt, or mildeſt ſtate of it; and where it will remain, ſometimes, for a long time when the cauſe of it is ſlight, or ſeldom repeated. But when the cauſe is great or conſiderable, or often renewed; as *cold* often repeated; or *improper food* conſtantly continued, the diſorder may be expected to continue and increaſe accordingly; ſo that it is very uſual for it to increaſe by degrees until the laſt and worſt ſtate of it takes place; which is, a conſtant motion for ſtool, the ſtools little in quantity, thin, watery, and commonly green and ſour.—Sometimes the ſtools are curdled, and have much the appearance of curds and whey; when they are generally accompanied with much pain and griping.

Griping is ſometimes attended with coſtiveneſs when it firſt comes on; but the coſtiveneſs ſeldom continues long, and a looſeneſs generally ſoon ſucceeds it. Children require to be open in their

their bodies; and two ſtools a day are as few as they generally have when they are healthy: ſo that when they miſs having a ſtool for a day or two, they muſt ſuffer ſome uneaſineſs, although they be not griped; but it ſeldom happens that coſtiveneſs is accompanied with any conſiderable and continued degree of griping.

That a griping and looſeneſs are often preceded by coſtiveneſs for a day or two, is owing to improper food, as bread, &c. remaining upon the ſtomach without being properly digeſted; till nature, by an effort, relieves herſelf by a looſeneſs (ſee the account of the digeſtion of the food; as alſo, ſickneſs).

A griping may happen without any ſenſible degree either of looſeneſs or coſtiveneſs; but it muſt be ſo ſlight, when the looſeneſs eſpecially is not perceptible, as ſcarcely to need noticing, or any particular aſſiſtance; and cannot be of long duration without a change and alteration of the ſymptoms. It is generally upon this occaſion cauſed by cold.

Convulsions ſometimes attend griping; yet are never a real ſymptom of it, except when the griping is violent and in the extreme, and has been produced by ſome cauſe uncommonly violent or long continued.

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The Cure of the Gripes.

When, by a proper attention to the *ſymptoms*, a child's complaint is clearly and diſtinctly diſcovered to be the gripes; the firſt ſtep muſt be to ſeek for the cauſe which may moſt likely and reaſonably be ſuppoſed to occaſion the complaint: and when that is diſcovered, and removed, as much as circumſtances will admit of, the complaint may be reaſonably expected to be relieved in part, or entirely removed; it being a maxim in phyſic, that, *remove the cauſe, and the effects will ceaſe.*—By way of example; ſuppoſe a child has been uncommonly, and more than uſually expoſed to the cold; has had any part of the dreſs left off; or has been ſuffered to remain wet without being changed for a much longer time than uſual; and has the gripes: it is reaſonable to ſuppoſe that the cold, or wet, is the only or chief cauſe of the griping (provided no other cauſe is known or ſuſpected at the ſame time); and that it will moſt likely be relieved, or removed, in a ſhort time, by keeping the child more regularly warm and dry.—Or, if there is reaſon to ſuppoſe the complaint is occaſioned by a conſtant or occaſional taking of improper food, it moſt likely will abate, or entirely

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go off, by changing that food for ſome other that may be expected to agree better.

It is of great conſequence in all diſeaſes to take them early and before they have been ſuffered to advance far; as, when the cauſe is early diſcovered, and ſpeedily removed, a complaint may be expected to yield immediately and without further diſturbance; as it is ſtriking in a direct manner at the root of the evil: but when they have proceeded to a certain length, they may be ſo aggravated, and may become ſo inveterate, as not to be ſubdued without the utmoſt difficulty. This caution is in no inſtance more neceſſary to be attended to than our preſent ſubject, the gripes; which may, upon moſt occaſions, be prevented, and removed, by proper precautions, timely obſerved and taken, and which ought never to be neglected; as it is a diſeaſe the moſt painful and diſtreſſing that children are liable to, and proves very frequently fatal.

In the CURE of the GRIPES with LOOSENESS, it will be always neceſſary to diſcover the cauſe as juſtly as may be; and, by removing it, the complaint will very likely diſappear without any other means or aſſiſtance, when it is ſlight and taken in time. (It will ſeldom be difficult to find out the cauſe, as the general prevailing

cauſes

cauſes at this early period have been obſerved to be very few, and may be nearly reduced to two, namely *cold*, and *improper food.)* While the complaint is in the firſt ſtate, that is, while the ſtools are not much more frequent than uſual, nor much thinner, nor curdled, nor altered in their colour, it is ſeldom any thing is needful in the way of medicine; and it will, moſt likely, go off without: but if, notwithſtanding every precaution with reſpect to warmth and food, the griping continues, with a frequent motion for ſtool, the ſtools ſmall in quantity, and thin and watery, green and ſour, or curdled, it will ſeldom go off (readily at leaſt) without the aſſiſtance of medicine; and for this purpoſe the following powders will anſwer very well.

No. 1. Take of *turkey rhubarb*, finely powdered; and *magneſia*; each eighteen grains: mix them well together, and divide them into ſix papers; one of which is to be given every night and morning, mixed in a little warm water, while they laſt.

These powders may be given to the youngeſt child, and under three months; but at that age, or afterwards, they may be made one third ſtronger or more in quantity: they will often check the looſeneſs, and reſtore the colour and conſiſtence of the ſtools (which are favourable

ſymptoms) when, or before, they are all taken; and they may be repeated a ſecond time, either immediately, or afterwards, as there is occaſion: they are moſt proper when the looſeneſs and other ſymptoms are not in the utmoſt extreme; but when that happens, and the gripings are very ſevere and violent, the following mixture may be given, as it is more particularly calculated for diſperſing and expelling wind, and giving eaſe when there is much pain, than the powders.

No. 2. Take of *turkey rhubarb*, twelve grains; *magneſia*, eight grains; *ſpirituous tincture of rhubarb*, one dram; *ſyrup of poppies*, two drams; *ſimple mint-water*, an ounce and a half:* mix them properly together, and ſhake the bottle well every time it is uſed.

If a child, who is to take this, is in the firſt or ſecond month; two, or three, middle ſized teaſpoonful may be given for a doſe, and repeated every four hours while it laſts, or until

* Watery and ſpirituous liquors, although commonly ordered by weight, are generally meaſured; as a pound meaſures a pint; and an ounce, by meaſure, is two middle ſized tableſpoonful: and as an ounce contains eight drams, ſo a tolerably large teaſpoon, which is about the eighth part of two middle ſized tableſpoons, or an ounce, will meaſure a dram, or as near it as may be.

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the griping and looſeneſs ſenſibly abate. If the child is three, four, or more months old, three or four teaſpoonful may be given each doſe: upon which laſt occaſion it will be proper to have a double quantity of the medicine prepared at a time.

THIS, like the powders, may be renewed as there may be occaſion; and benefit may alſo be expected from it, when the colour and conſiſtence of the ſtools alter for the better, by returning and approaching to their natural appearance; and, by an abatement of the frequency and ſeverity of the fits of griping and pain; which will often take place in the courſe of twelve or twenty-four hours.

WHEN a child, with this complaint, is wet-nurſed, it will be proper to confine him entirely to the breaſt for his food, if there be milk enough; and if the mother, or nurſe, has taken any thing which is likely to diſagree with the child, ſhe muſt, at this time, be more obſervant and careful in her diet. But if it ſhould happen (as it ſometimes will with children in the month) that a child will not, or is not able to take the breaſt; a little weak broth, or veal or chicken tea, as before mentioned page 104, will be very proper; it will not only anſwer the intention of food, but that of a medicine likewiſe; as it will

be comfortable to the bowels, and will greatly aſſiſt in correcting acidity or ſourneſs, which very often prevails, and adds very much to this diſeaſe. When the mother, or nurſe, has reaſon to ſuſpect ſhe may have taken any thing which (as juſt now obſerved) may diſagree with the child, the veal tea will alſo be very proper for him. The milk and water, prepared as above,* may alſo be given at any time when it may be ſuppoſed there is occaſion for any other kind of food.

Upon this, as upon every other occaſion of ſickneſs, the advantage of early accuſtoming children to feed with a ſpoon,† will be very apparent; as they will be got to take ſuch food and medicines as may be proper for them with much leſs difficulty than when they have not been uſed to a ſpoon. The mother, or nurſe, if ſhe is upon a vegetable diet, ought to alter it a little for the preſent; ſhe muſt, particularly, abſtain from fruit; and eat ſparingly, if at all, of peas, beans, cabbage, cauliflower, greens, ſalads, and the like: potatoes, ſpinnage, turnips, and carrots, are perhaps the leaſt exceptionable of roots and vegetables in common uſe; and aſparagus, artichoke, and kidney-beans, of thoſe

* See page 85. † See page 121.

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that are more rare. Malt liquor is as well avoided; and water with a toaſt in it, with or without (as is moſt agreeable) a little brandy, or foreign wine, as madeira, red or white port, &c.* is to be preferred. Salep, ſago, and gruels of all ſorts, are proper; as are alſo broth and fleſh-meat, which may now be indulged in with more freedom than at another time.

When a child is *dry-nurſed*, a ſtrict regard and attention to his food is of the utmoſt importance in this complaint: for although caſes will happen where an error in the diet ſhall not have been the apparent cauſe of the complaint; yet a trifling error in the diet will add to it, and may greatly protract the cure: but, from what has been obſerved, the food is by far the moſt frequent cauſe. Upon this occaſion, then, if the child's diet has differed from that which has been here recommended (page 84), it will be adviſable to decline it, and adopt this; the good effects of which, as I have frequently obſerved, are generally very apparent in a ſhort time, when the caſe is ſuch as will admit of remedy. The more urgent the caſe is, the greater will the neceſſity be for obſerving a

* Home-made wines, old raiſin wine excepted, are not ſo proper, as they are generally windy.

ſtrictneſs and exactneſs in this matter. In caſes the moſt alarming and dangerous, aſſes' milk, when it can be come at, is to be preferred to every thing elſe, as food; and when that is not to be had, the milk and water may be given as a ſubſtitute for it: veal or chicken tea become upon this occaſion extremely ſerviceable and proper, and may be given alternately with the other food, or as they appear to agree.—When the complaint proceeds from improper food alone, it ſeldom happens that the aſſiſtance of medicine is required; as a due attention to the diet only, generally proves an effectual and ſpeedy cure, even in many caſes where the diſorder has been of long ſtanding. Medicine is likely to be of the moſt ſervice when the complaint comes on ſuddenly and with great ſeverity; as then it (the medicine) may immediately correct the exciting cauſe, or aſſiſt in carrying it entirely and quickly off: therefore, whenever the complaint comes on ſuddenly, and does not ſeem to abate in a ſhort time, it will be proper to give the powders No. 1. or the mixture No. 2. But where a child has had an habitual griping and looſeneſs for ſome time, the medicines will ſeldom be required, as the complaint will moſt likely go off by a proper attention to the diet alone; which,

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if it ſhould not, after a proper trial, the medicines may be had recourſe to; the powders may be firſt tried; and, if they ſhould not anſwer, afterwards the mixture. Although the complaint will upon this laſt occaſion, generally go off without medicine; yet caſes will happen ſometimes, where, from the cauſe being long and highly aggravated, the diſeaſe becomes very ſevere and in the extreme, and calls for aſſiſtance of every kind to be ſpeedily adminiſtered: medicine, in this caſe, will act conjunctively with the food in reſtoring the proper ſtate of the bowels, and preparing them to receive afterwards what is properly ſuited to them.

The medicines, here recommended, are ſuch as may always be given with the greateſt ſafety, and will generally prove ſufficient without any other: on which account no others have been offered; as a greater variety might perplex and miſlead thoſe who are not converſant and experienced in medicine. There is, however, a medicine which often is of the greateſt ſervice in this complaint, and which I have hitherto forborne mentioning, as it cannot very ſafely be given without a good deal of care and circumſpection, although perfectly ſafe and harmleſs when adminiſtered with caution: it is, an antimonial puke. There are many preparations of

antimony made uſe of for this purpoſe: the following is full as proper as any other:

No. 3. Take one grain of *tartar emetic*; diſſolve it, perfectly, in two ounces (or four tableſpoonful) of water.

Of this, a child in the month may take a teaſpoonful, and repeat it every three quarters of an hour till it makes him throw up, which it will generally do the firſt or ſecond taking: it moſtly works downward alſo, a little. A child from two to three months old may take two teaſpoonful for a doſe; from three to five months, three ſpoonful; and ſo on. It may be repeated once a day, or every other day, while the complaint continues with any degree of violence. If, after a trial of the other medicines, the looſeneſs and other ſymptoms do not ſenſibly abate, it will be very proper to begin with this; which may be given, in the form and quantity here directed, with the moſt perfect ſafety, in all ſituations. Children ſeldom throw up oftener than twice, or three times, with it; after which they commonly go to ſleep, and ſeem much relieved by it.—The caſes in which I have found this medicine of the greateſt ſervice, and which ſeem moſt to require it, are thoſe which are attended with ſickneſs at the ſtomach (ſee ſickneſs) and fever; both of which it is admirably

mirably calculated to remove. A child may be known to be feveriſh, when the inſides of his hands are much hotter than uſual, when he takes the breaſt or drink more greedily than common, and when his mouth feels hotter than uſual to his nurſe's breaſt. The looſeneſs which ſo generally attends the *Thruſh*, or ſore mouth, is often accompanied with fever, when this medicine becomes moſt particularly ſerviceable. It is alſo of great ſervice in teething, and in the meaſles.

The doſe of the medicine, here ordered, is ſuch as will moſt commonly be proper; but it may be increaſed or diminiſhed at pleaſure, according to its effects. It ſuffers in its quality by being kept longer than a few days. Where proper medical *advice* is at hand, it will be adviſable to procure it to direct the giving of this medicine, although it may be given with the utmoſt ſafety without, and can never do harm where there is a looſeneſs, whatever cauſe it may proceed from, or whatever other ſymptoms may attend it.

A child will ſometimes have his backſide red, inflamed, and ſore, by the frequency and ſharpneſs of his ſtools; which adds to his fretfulneſs and uneaſineſs: all which the following application will generally remove or relieve. Take of,

extract

extract of lead, and *brandy*, each thirty drops; put them into a ſmall vial with four ounces (or eight tableſpoonful) of water. With a little of this, aired by the fire in a teacup, let the parts be bathed, once or twice a day, with a ſoft linen rag.

That the foregoing rules and directions may be clearly underſtood, and to prevent their being miſapplied, the following brief recital of them may, by way of general explanation, be attended to.

When a child has had a looſeneſs for ſome time, and which is not ſo ſevere at preſent as immediately to threaten his life; the cauſe of it muſt be attentively ſought for; and when diſcovered, muſt be removed as much as poſſible. As it moſtly happens that improper food (in dry-nurſing) is the ſole, or chief cauſe of the complaint, and always aſſiſts and adds to it from whatever other cauſe it may proceed, it will always be neceſſary to pay the ſtricteſt attention to the diet; by which means the complaint will generally, without the aſſiſtance of medicine, be very ſoon greatly relieved, or totally removed: but if, after a proper trial, ſufficient relief is not found, and the diſorder gains ground, the medicines may then be given.—When a child, in a good ſtate of health, is attacked ſuddenly with a ſevere griping

and

and looſeneſs; if the diet has not been properly regulated, or there has been any occaſional remiſſneſs or neglect in it, it muſt be immediately corrected; and if the medicines are given, the complaint will generally be much ſooner and more effectually removed with, than without them; and which will happen, whatever other cauſe the complaint may ſuddenly proceed from.

THERE will ſeldom be occaſion to repeat the powders, No. 1. and the mixture, No. 2. immediately: if benefit is found from them they may be repeated in the ſpace of two, three, or four days after the firſt are finiſhed, if the complaint continues, or returns, ſo as to require it. But if during, or after the firſt trial no benefit or relief is obtained, it will be needleſs to repeat them, but in their ſtead give the antimonial puke as above directed. When relief is to be expected, or had from the puke, it is generally diſcovered and obtained upon the firſt trial; but which if it is not, that muſt be no obſtacle to a ſecond, or third attempt.

I HAVE been fortunate enough to meet with but very few caſes which did not terminate favourably when the complaint has not been the direct reſult of an hereditary or conſtitutional affection (which rarely happens), and when the regulation of the diet was ſtrictly complied with,

with

with, now and then, the aſſiſtance of the medicines here mentioned: but I have invariably found the diet to be of more avail than all other precautions and endeavours united.

Rhubarb, is a medicine given very commonly to young children, and is very proper when there is a looſeneſs. The *ſyrup* of rhubarb is ſometimes given on account of its being palatable, but poſſeſſes no other quality ſuperior to rhubarb in ſubſtance.

Magnesia is a very uſeful addition to rhubarb, and may always be given mixed along with it (as in the powders, No. 1.): it is gently looſening, and as it corrects ſourneſs, will abate griping; it alſo aſſiſts the operation of the rhubarb. *Magneſia*, alone, will ſometimes check a ſlight looſeneſs; which it does by correcting the ſourneſs that occaſions it, and which is its chief and prevailing quality, and for which it is in ſuch general uſe and eſteem with grown-up perſons who have ſour ſtomachs.

Spirituous Liquors and *cordial waters* of various kinds are frequently given when there is griping, to diſpel wind; and upon ſome occaſions anſwer that purpoſe very well: they ought always to be well diluted with water. They are moſt proper upon ſlight occaſions, as, a ſudden fit of griping from cold or any other accidental

cauſe;

cauſe; but they ought not, upon any occaſion, to be given freely, nor frequently repeated: for although they will ſometimes ſtill the pain, when ſo given, they do it by intoxication, which is only a temporary relief, and not a deſirable method of obtaining it, as the pain is ſubject to return whenever the effect of the liquor ceaſes. —Among the variety of liquors and cordial waters which are uſed upon this occaſion, *geneva*, or *gin* as it is commonly called, mixed with water, appears the beſt ſuited to anſwer the intended purpoſe, being, when good, a light, pure, and wholeſome liquor, and, from the juniper berry with which it is impregnated, is well calculated to diſpel wind.

The free uſe of HOT SPICES, and SEEDS of different kinds, is by no means eligible, as they are no way calculated to remove any of the cauſes of the complaint; and their effect, like that of the ſpirituous liquors, can be only temporary and imperfect: they may, from their heat, injure the ſtomach and bowels; and may, by conſtant uſe, become ſo habitual that a child will not readily take his food without them. Aniſeed, or fennel-ſeed tea ſeems the leaſt exceptionable form of giving them; and, like the gin and water, may be given in occaſional fits of griping; but, like medicine of every kind, their uſe ought

to

to be limited and reſtrained, to make them of more efficacy when wanted, and to prevent the effect of habit. Pepper-mint water may be ſometimes given to advantage.

THERE are a number of quack medicines impoſed upon the public under various titles, as Godfrey's cordial, &c. &c. for this complaint in children; but as their compoſitions are as myſterious and difficult to diſcover as their good qualities, nothing more can be ſaid in their favour, than that, like all medicines, they may be ſuppoſed to have their uſe when properly applied; but the riſque, from miſapplication, overbalances any benefit which is to be expected from them.* There is a *drug* however upon which, it is well known, their chief efficacy depends; and that is, *opium*; hence it happens they all have a ſtilling or ſedative power, and a child who takes them will commonly be eaſed of his pain for a time, but which returns again, and calls for a repetition of the medicine, without in the leaſt removing the cauſe of the complaint, by which, only, the diſeaſe is to be cured. It is this particular quality in opium, that calls for a continued repetition of it with thoſe who take it,

* See page 21.

which

which makes its uſe ſo univerſally dreaded and avoided: it nevertheleſs becomes a ſovereign remedy upon many occaſions, when judiciouſly managed; but it ſhould never be wantonly ſported with, nor given without the greateſt prudence and precaution. I have known Godfrey's cordial given to children, ſucceſſively for months, with no other deſign, towards the end, than keeping them quiet in the nights; but which was begun with, at firſt, for a griping, or what was ſuppoſed to be ſo. The children who take it, in this manner, are lifeleſs and inactive, do not thrive well, and are with very great difficulty weaned from it; all which are the natural conſequences of the free uſe of opium. The medicines of this deſcription that are a little looſening are to be preferred to thoſe which are not ſo.

Those who are inclined, from any motive, to give medicines of this kind, ſhould do it cautiouſly, and not make too free with them; one, or two, moderate doſes is as much as in general ought to be ventured upon and is likely to be given to advantage in the courſe of a week or a fortnight; and with this precaution they can ſeldom do harm, when ſuch like medicines are *really* wanted. If it ſhould be obſerved, that the mixture No. 2. contains ſome of the objectionable

tionable articles here enumerated and reſtricted, it muſt at the ſame time be noticed, that they are in ſmall quantities, and ſo combined as to ſtrike at the root of the complaint, as well as give preſent relief. The abuſe of ſpirituous liquors, and quack medicines of the opiate or compoſing kind, may be obſerved to happen moſt frequently, and in the greateſt degree, with children who are nurſed from home; who, when they are croſs, from griping or any other cauſe, are ſupplied with them, to ſtill and quiet them. Nurſes and ſervants at home will alſo ſometimes be guilty of the ſame practices, which, as highly injurious, ought as much as poſſible to be prevented.

Chalk is ſometimes put, ſcraped fine, into childrens food to check a looſeneſs, and which it will often do: the only danger that can be apprehended from its uſe is, that it may ſtop a looſeneſs too haſtily; therefore it may not be amiſs to give one of the powders of rhubarb and magneſia now and then, at the time the chalk is given. Chalk, for this reaſon, is not ſo proper in looſeneſſes at the beginning, and when they have come on haſtily; but is proper enough in thoſe which have been of longer ſtanding and continuance: it will perhaps *always* be adviſable

to

to give rhubarb and magneſia, now and then, at the ſame time.

When *convulſions* accompany this complaint, as a ſymptom of it merely, no other treatment, than that which has already been deſcribed, will ſcarcely be neceſſary; except, they come on at the beginning of the complaint (or at any other period of it and the child is luſty, and ſtrong and healthy in other reſpects), then a leech or two, applied to the foot, will ſometimes give relief.

If his complaint is of ſome ſtanding, the looſeneſs very violent, and he is at the ſame time weak, and much reduced, the mixture, No. 2. will be very proper; and, upon which occaſion, the quantity of the ſyrup of poppies may be increaſed to one half, or double the quantity. A *warm bath* ought not to be omitted upon this occaſion; and flannels, wrung out of hot water, and applied warm to the belly, will ſometimes give relief.

A *Mithridate* plaiſter, applied to the belly, will often afford conſiderable and ſpeedy relief.

The warm bath and flannels may be uſed at any time to advantage when the gripings are very ſevere, although there be not any convulſions; and may be continued, repeatedly, two or three times in the day: they generally

afford preſent relief. When there are convulſions, a bliſter to the belly, after other means having failed of giving relief, may be tried; it is a very ſafe remedy. It ſeldoms happens, when the complaint has proceeded thus far, that medical aſſiſtance, is not more particularly obtained: here it becomes very neceſſary.

CHILDREN who are *wet-nurſed* are liable, ſometimes, to attacks of griping and looſeneſs, with or without green ſtools; but which are commonly much ſlighter than what happens to thoſe who are *dry-nurſed.* This complaint, with children at the breaſt, is moſt prevalent at particular ſeaſons, eſpecially at the decline of ſummer. It often appears in the month of Auguſt, when it is ſometimes accompanied with a *raſh* (ſee *raſh)* and ſlight fever, and frequently prevails during the autumn *(ſee note to page* 142) and until the froſt ſets in. Upon this occaſion the complaint will generally be effectually relieved by a few doſes of the powders No. 1. page 151: if they ſhould fail; the antimonial puke, No. 3. page 158, will be adviſable; eſpecially if the child is obſerved to have any ſickneſs at ſtomach, or is feveriſh.

THE means, and cautions, which have been here offered, for the relief and cure of that formidable, frequent, and diſtreſſing complaint, the

the gripes with looſeneſs, are ſuch as experience have directed as competent, in general, in wet-nurſing particularly, to accompliſh a purpoſe ſo deſirable, and, often, difficult. However, it will ſometimes happen, in dry-nurſing, that none, nor all of them are equal to the intention; and that a remedy, which is yet wanting, is the only one upon which an ultimate hope and dependence is to be placed—which is—*a breaſt*.—Therefore when all theſe means and cautions, of medicines, diet, &c. have been tried, and prove ineffectual, and the child ſeems to decline, rather than get forward, *a breaſt* muſt, if the child's life is earneſtly ſolicited, be got for him: and if he is under, at, or even above a month old, he will moſt likely take to it, although he has not had the offer of it before.—As it has been repeatedly obſerved that continued and ſevere gripings and looſeneſſes, in dry-nurſing, are occaſioned by the food; and that it is ſo difficult a matter to give a proper ſubſtitute for the breaſt, it will appear leſs ſurpriſing that children will ſometimes be found who cannot be ſupported or exiſt without it; and which can, perhaps, be eaſily accounted for, by conſidering, that it is a proviſion nature has bountifully and regularly ſupplied to all mothers, in every climate and country, who do not

ſenſibly and materially deviate from the paths intended and preſcribed by her; and that, therefore, it is unlikely ſhe ſhould liberally and fully provide for a defect which was ſcarce likely to occur. Nature, however, has wiſely ordered that the *parents* ſhould be able to ſubſiſt upon a change of food; otherwiſe, it would be impoſſible they could be ſupported, upon the variety they are neceſſarily obliged to take to, in the various climates and ſeaſons they are often ſucceſſively expoſed to. See page 70 and following.

A griping with looſeneſs is moſt ſevere and frequent with thoſe children who are dry-nurſed; and of courſe thoſe who are wet-nurſed are freer from it, and have it more ſlightly. When it prevails in the extreme, and proves fatal, from any of the common cauſes, it is generally by ſuffering it to continue too long, and advance too far, either, through negligence, or want of proper information and aſſiſtance. When it is epidemic, or the prevailing diſeaſe of the town or neighbourhood (upon which occaſion it moſt commonly is accompanied with a *ſevere* looſeneſs), it is often dangerous. When accompanied with convulſions, ſtill more dangerous. When it is otherwiſe and proceeding from any other cauſe, as cold, improper food, &c. it generally very readily admits of relief, and

ſevere

ſevere returns of it may be prevented. A ſickneſs accompanying a griping and looſeneſs is an unfavourable ſymptom.

Of the Cure of Gripes without a Looſeneſs.

A GRIPING ſeldom, as has been obſerved, happens to very young children without more or leſs of a looſeneſs; yet it ſometimes will, and that, without any apparent alteration in the number or appearance of the ſtools; but when that is the caſe, it is commonly ſlight and of ſhort duration, and may be ſuppoſed to happen (as it generally does) from cold; and it is ſeldom that any thing is needful to be done upon this occaſion to remove it. However, if any thing may be thought neceſſary, a little aniſe, or fennel-ſeed tea, hartſhorn and water, peppermint water, or geneva or any other cordial that may be preferred, properly diluted with water, will be proper. This is the occaſion when theſe and other things of the like kind and quality can be employed and given with propriety and a proſpect of advantage. But if there be a tendency to coſtiveneſs, or if, as ſometimes is the caſe, a coſtiveneſs ſhould have taken place at, or before, the commencement or firſt attack of the griping, theſe warm and cordial things

will not, cannot remove the griping; and the means to be taken muſt be chiefly, or ſolely, directed to the procuring a looſe ſtool or two, which will moſt likely entirely remove the griping: the medicines, ſuited to this purpoſe, have been enumerated, and will be found under the article coſtiveneſs (page 113). Whether manna, magneſia, or caſtor oil is given, it will be proper to mix two or three teaſpoonful of peppermint water along with it. Opiate and compoſing medicines of all kinds are improper in all caſes of griping accompanied with coſtiveneſs, and until the coſtiveneſs be removed; when, they may be given to advantage, if needful. If it ſhould happen, as it rarely does, that the griping continues after the coſtiveneſs is removed, the mixture No. 2. (page 152) will be proper. And if a looſeneſs ſhould ſucceed a coſtiveneſs, and become immoderate, the ſame mixture, and other means as have been recommended for the cure of a looſeneſs and griping, muſt be purſued.

A GRIPING which is accompanied with coſtiveneſs is rarely dangerous, or of long continuance, as it is generally entirely and readily removed by procuring a looſe ſtool or two, and as the cauſe from which it proceeds is commonly cold, or ſome other, equally as trifling and eaſily obviated.

WIND

WIND *in the* STOMACH *and* BOWELS.

A CHILD, like a grown perſon, may have wind upon his ſtomach which may be troubleſome and uneaſy to him, without griping him, or ſenſibly affecting or diſordering his bowels, as is diſcovered by his not being ſo croſs with it as a child is when griped. A child is diſcovered to have wind upon his ſtomach, by the wind often riſing into his throat, which makes him ſtruggle at times as if to get his breath, and from which he is occaſionally relieved by the eructation or breaking of wind upwards; and, as it often returns upon him, it becomes very teaſing, and interrupts his reſt: he *generally* takes his food unwillingly. It is common with children in the month who are dry-nurſed, and before they begin with what is called poſſetting. A variety of things are given upon this occaſion to diſpel the wind, ſome of which have been enumerated page 162 and following: but none of them, nor any thing elſe that I have ſeen given to procure a temporary relief, exceeds *ſpirit of hartſhorn*, or *hartſhorn-*

drops as they are commonly called. Three drops of the hartſhorn may be given, to a child in the month, in about half a tableſpoonful of cold water, and repeated two, or three times in the day, or as there may be occaſion. Hartſhorn, when it will anſwer the purpoſe, is to be preferred to cordials, ſpirits, ſeeds, ſpices, and hot things, of any kind; as, although it is fully as powerful in diſpelling wind as any of them, it will not, by a permanent heat, nor by repetition, injure the ſtomach as they do; nor can any bad habit or other diſadvantage ariſe from giving and repeating it as often and long as it may be neceſſary ſo to do. It is endowed with a property which makes it a deſirable medicine for children; which is, it corrects and removes acidity or ſourneſs, a principal cauſe of griping with children. Its uſe in theſe intentions is well known by grown up perſons, with whom it is a favourite and familiar medicine: and the reaſon why it is not extended more generally to children, proceeds, I imagine, from a ſuppoſition that it is too ſtrong for them; but which is a miſtaken notion; as it may be given, as above directed, with eaſe and ſafety. The doſe here mentioned is the ſmalleſt that need ever be given, and it may be increaſed, as a child grows older eſpecially, to four, five, or ſix drops.

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As wind upon the ſtomach is, with a child as well as a grown perſon, to be conſidered as a mark and indication of a weak ſtomach and indigeſtion; ſo it will be obſerved to be moſt common and troubleſome to thoſe children who are dry-nurſed and fed with food of an improper quality, as bread, thick and rich milk, &c. which cannot digeſt and paſs the ſtomach ſo perfectly and readily as it ought to do: for we well know, that whatever is heavy of digeſtion, and lays long upon the ſtomach, is not only uneaſy, but alſo cauſes wind there; and cannot but be ſenſible how much theſe painful ſenſations muſt be increaſed if we were compelled, as infants are, to a conſtant repetition of the food which occaſioned them. Many weakly, puny children, who are even wet-nurſed, will now and then be obſerved to have a wind upon their ſtomachs; and the *hickup*, which they all have at times, is occaſioned by it; as alſo thoſe who are the moſt carefully fed in *dry*-nurſing; but when it occurs only now and then, and that ſlightly, it is not worth notice; and if any attack of it ſhould ſeem more ſevere than uſual, the hartſhorn and water will moſt likely relieve it. The occaſions which call for a more particular attention, are thoſe where, as above-named, when the child is dry-nurſed, he takes his food unwillingly, and

ſwallows

ſwallows with difficulty from the wind riſing into his throat, and that for ſome ſucceſſive days, a week, or longer. Whenever therefore the complaint appears in this latter form, it will be neceſſary to pay the ſtricteſt attention to his food (pages 56 and 84) and by no means to force more, even of ſuch as is the moſt ſuitable, than he is diſpoſed to take willingly (ſee page 112). If he is coſtive, it will be proper to give him a little manna, or a teaſpoonful of caſtor oil: and if he has now and then griping ſtools, the powders No. 1. page 151; but if the powders have not the deſired effect, the puke No. 3. page 158, will ſcarcely fail. Wind upon the ſtomach, when to exceſs, and occaſioned by the conſtant uſe of improper food, is often a preſage and fore-runner of an alarming ſickneſs that frequently terminates in a ſevere griping and looſeneſs, as deſcribed in the article immediately following.

Children, alſo like grown up perſons, ſeldom have wind in their bowels without being griped by it; but which they will ſometimes have without being either coſtive or too looſe in their bodies. When it ſo happens, it moſt commonly proceeds from cold, and will generally go off in a ſhort time. The hartſhorn may in this caſe be tried, although its effects will not always be ſo ſtriking as when the wind is in the ſtomach; and

and if it does not anſwer, recourſe may be had to geneva and water, aniſe or fennel-ſeed tea, &c. as mentioned above, page 162 and following. If theſe fail, and the complaint increaſes, it muſt be treated as a griping without looſeneſs, as in the preceding article, page 170.

Some children ſeem naturally more ſubject to wind in their bowels than others; and which can be accounted for no otherwiſe, than as proceeding from a particular weak and tender ſtate of thoſe parts. And as it is much increaſed by cold, a particular attention muſt be paid to keep and defend thoſe children who are liable to it from taking cold, by a proper regard to the cloſeneſs and warmth of their dreſs, and by keeping them out of the air in the firſt or ſecond month.

A Sickness, *with or without throwing up.*

INFANTS are very ſubject to a ſickneſs the firſt or ſecond week. Sometimes they throw up with it; and at other times they do not, but lie in a dozing ſtate, without motion, the lips pale, and a paleneſs and ſinking of the face; and

and they generally refuſe their food, or do not take it ſo freely as at other times, ſeemingly owing to their being ſtuffed and full at the ſtomach, and not able to get it down.

A THROWING up, or *poſſetting* as it is commonly termed, is ſeldom eſteemed an unfavourable circumſtance with young children; yet the ſickneſs that happens at this early period is generally from a widely different cauſe with the poſſetting, which rarely happens ſo early, and, when it does, proceeds from a natural and not unfavourable cauſe; whereas the ſickneſs that comes on at this time, whether accompanied with a throwing up, or not,* is unnatural and unneceſſary, and therefore not deſirable. In poſſetting, what comes up is in a digeſted ſtate; whereas what comes up at this period, and upon this occaſion, is ſcarcely changed or altered from what it was when it went down: and, if it is altered, appears in hard curdled lumps. From which, it clearly appears, that the cauſe of this ſickneſs, as here deſcribed, with, or without, throwing up, and which is ſo frequently obſerved to happen during the firſt three or four days, or

* THIS natural throwing up, or *poſſetting*, has been noticed and explained in the concluſions of the notes to the *medical reader*, pages 58, and 78.

as

as long as the child is fed with a ſpoon previous to his getting the breaſt at all, or ſo ſufficiently as to ſatisfy him without feeding with a ſpoon,* is altogether occaſioned by the food that he takes, which, not being ſuitable, diſagrees, and therefore will not digeſt and paſs the ſtomach as it ought to do, but remains unaltered, till nature, by an effort, relieves herſelf by a ſickneſs, or a looſeneſs: but until this ſickneſs, or looſeneſs, or both, take place, and while the food ſtays upon the ſtomach, it lies there as an oppreſſive load, and the child is overcome and overpowered by it; which accounts for the child's looking ſo pale and otherwiſe ill. This ſickneſs at ſtomach, without throwing up, is a very common cauſe of alarm and much uneaſineſs and anxiety to the mother and friends, who ſuppoſe the child, from the apparent great and, oftentimes, ſudden alteration in his look, muſt be in a dangerous ſituation; although, notwithſtanding the alarming appearances, it is very rarely attended with immediate danger; and, when the cauſe is known, may, by proper means, be readily removed, and a return of it prevented. The means to be purſued for theſe purpoſes are, firſt,

* This may happen, at any future period, with a child that is dry-nurſed, or has been weaned.

to remove the load from the child's ſtomach, which will give him immediate relief, as will be perceived by his reſuming his former look; and this will often be done by giving him a tea-ſpoonful of caſtor oil, which may carry the complaint off by ſtool: but if this ſhould fail of giving the wiſhed for relief, the antimonial puke, No. 3. page 158, given as there directed, will ſcarcely fail of fulfilling the intended purpoſe. To prevent a return of the ſickneſs with, or without, throwing up, the child's food muſt be ſtrictly attended to; and if (as is generally the caſe) it happens before the child gets the breaſt, he had better not be fed again until he can have the breaſt: but if food or nouriſhment from the child's real, and not imaginary, weak ſtate, is abſolutely and immediately neceſſary, it muſt be given of ſuch kind as may be reaſonably expected to agree better, and ſuch as has been adviſed when treating of the food and diet, pages 56, 84, and following.

This complaint is very common, at this early period, with thoſe children who are dry-nurſed, or thoſe (eſpecially weakly children) who are fed, in the uſual manner, before they get the breaſt. It is a common attendant or, rather, fore-runner of gripes and looſeneſs. It is more rare and leſs frequent with thoſe who are not fed at all, or

properly

properly ſo, before they get the breaſt: and when they come to have the breaſt plentifully, and take it freely, they ſeldom have any returns of it. It is not, as before obſerved, immediately dangerous; yet if it is neglected, by ſuffering the cauſe of it to be repeated and continued, it may lead to ſevere gripings and looſeneſs, that may, and often do, prove fatal.

A SICKNESS ſeldom ſeems ſo alarming when a child throws up with it; as throwing up, from time to time, relieves the ſtomach, and the child is diſpoſed to take food, and does not ſeem ſo dull and heavy: however, as the food does not digeſt, and is chiefly returned unaltered, or elſe in hard curdled lumps, it can afford little nouriſhment; and what happens to paſs the ſtomach will do more harm than good, by cauſing a griping and looſeneſs; all which will, in the end, terminate as unfavourably as in the caſe of ſickneſs *without* throwing up.

THIS caſe of *heart-ſickneſs*, as it is commonly called, when not accompanied with a throwing up, and which is very common to children in the firſt or ſecond week, for the reaſons already given, is not very generally underſtood; for when a child lies in a dull, heavy ſtate, without motion, refuſes his food, and, as is common in caſes of heart-ſickneſs, looks pale, ſunk and fallen,

fallen, without any obvious and viſible ailment to diſtinguiſh and point out his complaint by, it is ſuppoſed undiſcoverable, and that any means, to relieve him, will be needleſs and of no avail; however, from the deſcription and account here given of it, it can ſcarcely be miſtaken, and may as certainly be palliated, or entirely removed, by the means here recommended.

CHILDREN, with this complaint, will, often, have wind upon their ſtomachs, which becomes very troubleſome to them, eſpecially in ſwallowing their food; and is occaſioned by the ſame cauſe; namely, an imperfect digeſtion, as has been explained in the preceding article.

COMPLAINTS in the ſtomach and bowels are commonly ſo connected, and interfere ſo much with each other, that it is ſometimes difficult to diſunite and properly diſtinguiſh them. The preceding complaints, of, and in, the ſtomach and bowels, here treated of, are the moſt common and material. In deſcribing them, I have not been inattentive to what authors have ſaid upon them; yet as ſome of them have not, ſo far as I know, been noticed by authors; and as they are frequently ſo interwoven, and depend ſo much upon each other, I have given and deſcribed them exactly in the manner and form they have repeatedly appeared to me in practice.

practice. And although deſcriptions of the moſt ſimple complaints may, to thoſe who are perfect ſtrangers to them, at firſt ſight appear ſomewhat ſtrange, and difficult to conceive clearly; yet, there can be little or no doubt but that, by a careful attention to the deſcriptions here given, and a little acquaintance with the ways, appearances, and treatment of children, theſe will be clearly, properly, and eaſily diſcovered and diſtinguiſhed. I have been more full and particular upon the complaints of the ſtomach and bowels, and the cauſes that produce them, than moſt of the other complaints of children; for which I need offer no other apology, than, that they are the moſt frequent, and fatal, and, perhaps, the leaſt underſtood; or, at leaſt, that they are ſeldom ſo properly attended to as their importance requires.

If due attention was paid to remedying and preventing theſe complaints, the advantages to ſociety would be very conſiderable, as it would be a means of preſerving a number of the ſpecies that we ſee daily dropping into an untimely grave; and, with them, the fond parents great dependence, and chief delight.—If proper accounts were kept of the cauſes of the death of thoſe children who are dry-nurſed, and die under four months, throughout the kingdom, it would moſt likely appear that

two-thirds, or even three-fourths of them die of complaints in the ſtomach and bowels, evidently occaſioned by a diſagreement of their food. And if the ſame account was kept of the cauſes of the death of thoſe who die within the week from the birth, it would as likely appear that the ſame proportion are carried off by the ſame complaints, even if they are intended to be wet-nurſed; and which happens from improper feeding before they get the breaſt.

Of how much importance it is, therefore, to the comfort and happineſs of the parent, and the eaſe of her tender and ſuffering infant, to have this article of the diet (frequently, by an error in it, of ſuch alarming and fatal conſequences) properly regulated; and how much it behooves her to aſſert her juſt authority, in defence of it, againſt any other opinion that is directed by bigotry and ignorance; which generally, *ſolely*, governs and prevails upon theſe occaſions!

From what has been obſerved of the complaints in the ſtomach and bowels at this tender age, it ſeems highly probable, that, could thoſe children who are intended to be brought up by hand, or dry-nurſed, be but indulged with a breaſt for three, two, or *even one* month, from their birth, their ſtomachs and bowels would, in that time, acquire ſo much ſtrength as to prevent the complaints, either altogether, or in a great meaſure.

The

The THRUSH, FROG, *or* SORE MOUTH,

IS a complaint which children are ſubject to about the third week; it rarely happens earlier; but may come after that time. It is very commonly known and diſtinguiſhed by the name of a *ſore mouth*, which it really proves to be to the poor infant, as it is moſtly attended with a good deal of pain and uneaſineſs, eſpecially in feeding, in ſucking moſt particularly. The appearance in the mouth is, as if the child had been eating curds, and that ſome of them remained ſticking upon the tongue; to which the complaint and ſoreneſs are, at firſt, chiefly confined; but, afterwards, it will ſpread all over the inſide of the mouth, and be extended to the throat, ſtomach, and bowels. It is a very common and frequent complaint: when it happens, it proves troubleſome, and ought therefore to be cloſely watched, that, when it appears, its departure may be haſtened and expedited as quickly as poſſible. Whenever, therefore, any white ſpecks, or matter like curds, are obſerved to be ſticking upon the tongue, ſo faſt as not to be readily waſhed or rubbed off, it may juſtly be ſuppoſed the ſore mouth is commencing. If the child at this time is in the leaſt diſpoſed to

be coſtive, a little manna or magneſia muſt be given to procure one or two looſe ſtools; and which may be repeated afterwards, if the body does not keep gently open.—It will be neceſſary to have the tongue frequently cleaned; for which purpoſe many things are recommended, as honey, borax, alum, white vitriol, &c. a few leaves of dried *red roſes*, infuſed in boiling water, ſtrained off when cold, and a little *honey* mixed and diſſolved in the liquor, makes a very good mouth-water for this purpoſe: it is to be made uſe of, by tying a piece of linen rag upon the mouth or ſhank of a teaſpoon, which muſt be dipped in the liquor, and the tongue gently rubbed with it two or three times a day; and it muſt be regularly perſevered in daily, while any appearance of the complaint remains; although, in doing it, the child will receive ſome pain, eſpecially if the complaint has been ſuffered to increaſe before proper attempts are made to remove it; but when it is taken early, and at the beginning, the mouth will be kept tolerably clear and free, without paining the child; by which he will be enabled to feed with much more eaſe, and the complaint will be got rid of, in a tolerable eaſy manner, in the courſe of ſeven or eight days.—The colour of the ſpecks upon the tongue are, as has been obſerved, at

firſt

firſt white; yet it is very common for them to turn yellowiſh, and brown: they generally come off, at the laſt, in ſloughs.—When, from neglect, or any other cauſe, the complaint has continued for ſome time, it is very common for the child to have a degree of fever, very often accompanied with griping, and looſeneſs with watery, ſour, green ſtools; in which caſe the diſorder becomes more alarming and troubleſome.—As this complaint may be occaſioned by an imperfect or improper digeſtion of the child's food; ſo it is very liable to be brought on, or greatly aggravated, by improper food; it will therefore be very neceſſary to pay a ſtrict attention to the diet at this time, if the child is dry-nurſed; and to the mother's or nurſe's diet, if otherwiſe.*

When the looſeneſs is great, the complaint muſt be treated as a looſeneſs from any other cauſe,† with this caution, that the powders No. 1. page 151 (which are proper to be given as there directed), are to be preferred to the mixture No. 2. page 152; but, of all medicines, the antimonial puke, No. 3. page 158, is moſt eminently ſerviceable in this ſtate of the complaint, and is often attended with the

* See page 154. † See page 150.

happieſt effects, and therefore ought not to be omitted: it may be given once a day, while the complaint continues: as it commonly operates both upward and downward, it clears away the offending matter from the ſtomach and bowels, which is the cauſe of the complaint, and alſo of the fever; by which means the moſt ſenſible relief is obtained. The powders alone will ſometimes be ſufficient; but if they ſhould not, the pukes muſt no longer be delayed: it is needleſs to repeat that they are perfectly ſafe when given as above directed, page 158.

When the thruſh is neglected, and ſuffered to continue until it is communicated to the bowels, (as it begins firſt in the mouth, and is extended gradually and regularly downward) the ſtools will frequently be ſo ſharp and acrimonious as to inflame the child's backſide, and make it troubleſomely ſore; and which is the moſt certain proof and indication that the complaint has reached the bowels. When this happens, the parts, that are red, inflamed, and ſore, muſt be kept as clean as poſſible, and often waſhed with cold water. And, if the ſoreneſs increaſes, it will be proper to bathe them with the extract of lead and water, prepared as has been directed, page 159, for a ſoreneſs of the backſide, and in the manner there adviſed.

The

The GUM, *and* YELLOWNESS *of the* SKIN.

THE GUM is an eruption of red ſpots reſembling a thick raſh, which often appears after the birth, upon any, or every, part of the body: it is generally attended with a coſtiveneſs, and is very eaſily removed by giving any thing that is looſening, as manna, magneſia, &c. it continues but a ſhort time, is no way dangerous, nor need any thing farther be done for it.

A YELLOWNESS OF THE SKIN, which very often overſpreads the whole body, is very common with infants a few days after they are born; it ſometimes continues for ſome weeks, during which time it often becomes of a deeper yellow, or orange colour. It is not to be regarded, nor is any thing needful to be done to remove it, as it will diſappear totally and ſpontaneouſly at laſt. It is commonly ſaid that the ſkin is left clearer and fairer by it than it otherwiſe would be without it; which ſeems a doubt: however, it is an agreeable deluſion, and may help to reconcile ſo unpleaſing an appearance.

The SMALL-POX, *and* INOCULATION.

VERY young children are not ſo liable to take the ſmall-pox as thoſe that are older; ſo that it rarely happens that a child under ſix months old is attacked with the ſmall-pox; and they will, under that age, often eſcape it when they are in the ſame houſe where the diſeaſe is preſent. Their eſcaping the infection at this age, ſeems to be owing to a mildneſs of the juices of the body, which makes it not ſo readily ſuſceptible of that, and many other infectious diſeaſes; or when it does take place, it is ſometimes in ſo ſlight a degree as not to be diſcerned; which accounts for the opinion formed, and the declaration made, by many, that they have not had the ſmall-pox, although they have been inoculated for it, and have repeatedly been in the way of the infection; yet, upon enquiry, it will generally be diſcovered that they have been expoſed to the infection when infants, although they have not viſibly appeared to take it. I have ſometimes ſeen a child at the breaſt really, or apparently eſcape the ſmall-pox, when a great

great part of the ſame family had the diſeaſe. It is oftentimes difficult to communicate the infection by inoculation at this age, and it ſometimes will not take place at all. Dr. Young, a gentleman of eſtabliſhed character and abilities, inoculated ſeveral children at the Royal Infirmary in Edinburgh at about a week old; yet in none of them could he perceive the infection to take place; he nevertheleſs ſuppoſes that ſome of them took the infection, but that it was in ſo mild a manner that no external ſymptoms or appearances of it could be diſcovered; and yet ſo ſufficiently that they never would have the ſmall-pox afterward.

As the diſeaſe proves ſo mild at an early age, it may be ſuppoſed the moſt proper for communicating the infection by inoculation; and which it certainly would, if other reaſons did not diſcourage it; the principal of which is, a dread of convulſions, which infants are ſo ſubject to from many cauſes, and none more ſo than the ſmall-pox: it is true, all children have not convulſions with the ſmall-pox, and when they have, it is commonly in ſo ſlight a manner as not to endanger their lives; yet if the convulſions *ſhould* prove fatal, as it may happen, and has happened; that riſque is a ſufficient reaſon for forbidding the inoculation, and to point out the advantage

vantage of deferring it to a future ſeaſon, when ſo much danger is not to be apprehended from ſo alarming a ſymptom.

The greateſt diſadvantage which is ſuppoſed to attend a delay, is the riſque a child runs of taking the ſmall-pox in the natural way during that time; but, as has been already obſerved, that is an accident not much to be apprehended; and even in large towns, where the infection almoſt conſtantly prevails, may be avoided if the leaſt pains is taken to keep out of the way of immediate infection; and which, in country places, is very eaſily done. As childrens lives are ſo very uncertain, and hang by ſo ſlender a thread at, and for ſome months after, their birth; they, like tender bloſſoms, are ill qualified to reſiſt a rude aſſault or ſevere ſhock, of any kind, and are ſeldom able to cope with a complication of diſeaſes: a looſeneſs, or many other complaints they are liable to, might be equally dangerous with convulſions upon this occaſion.

The objections, here offered, cannot be ſaid to be much leſſened or removed at any age under ſix months; and at that age, or about the ſeventh month, the teeth are expected to make their appearance, which has been always ſuppoſed a ſufficient cauſe to forbid inoculation; and as teething often continues attended with danger

ger until the expiration of the twelve months, the practice of inoculation ſeems entirely prohibited and forbidden during the whole of the firſt year.

It is a practice with many to adviſe inoculation about the fifth or ſixth month, from a ſuppoſition, that a child will, at that age, have acquired ſtrength ſufficient to combat the ſmall-pox; and that they will avoid the riſque and danger from teething by doing it a little while before the teeth may be expected to come. But this argument proves a very deceitful one, as will hereafter appear,* and when it is conſidered; that the time of breeding the teeth, which may happen ſo early as the third or fourth month, is frequently as tedious, troubleſome, and dangerous, as that of getting or cutting them; and that there will be conſequently as much riſque and danger from the ſmall-pox at the time of breeding, as at the time of cutting teeth. I have ſeen a great many caſes, both in inoculation and in the natural way, where children have been cutting teeth, both ſingle and double ones, and where they have had the gums very much ſwelled and inflamed, with pain and fever, at the time of the eruption of the ſmall-pox, who have yet done as

* See *Teething*.

well,

well, and have had as ſmall a quantity of puſtules, or the pock, as if nothing of the kind had happened: however, as this is not always to be expected, ſome precautions will ſtill be proper to be obſerved.*

SOME

* *To the Medical Reader.*——It appears upon many occaſions, that although the ſymptomatic fever from cutting of teeth ſhall be very ſmart during the eruption of the ſmall-pox (as is diſcovered by the ſtate of the gums, and the febrile ſymptoms continuing beyond the period of eruption), yet that the diſeaſe does not ſeem rendered more unfavourable, or aggravated in any of its conſequences, by ſuch accumulated fever.—On the other hand, there is frequently the greateſt reaſon to ſuppoſe the diſeaſe much aggravated by ſuch fever. This difference and diſtinction I have frequently noticed under the following circumſtances. —I have obſerved that when a child has been attacked with urgent ſymptoms of dentition at the time of, or a day *or two* before, the eruptive fever of the ſmall-pox, that the diſeaſe (as in the firſt inſtance above-recited) has been as mild and favourable as might have been expected had no ſuch additional cauſe interpoſed. On the contrary, and when the ſymptoms of dentition may have ſeemed to aggravate the diſeaſe and its conſequences, I have often obſerved that the ſymptoms of dentition have exiſted without intermiſſion ſome time (perhaps a week, fortnight, or longer) before the attack of the ſmall-pox: or elſe that the child has had one or more *ſevere* attacks immediately previous to that of the ſmall-pox.—From theſe obſervations, it ſhould ſeem, that the ſymptomatic fever excited by the teeth

Some children get their teeth much eaſier than others; the greateſt difficulty and danger generally attends getting the firſt teeth; and if a child gets his firſt teeth without much trouble and uneaſineſs, it ſeldom happens that he has much difficulty afterwards. From which it may be concluded; that if, about the ninth or tenth month, a child has got two, or more, of his teeth without much trouble or difficulty, he may be inoculated with great ſafety: but if the teeth which he has then got, whether more or not, have come with much pain, fever, or difficulty, it will be moſt adviſable to wait till theſe difficulties and all danger from teething are got over, before the inoculation is ventured upon.

teeth will not always ſenſibly add to the quantity of the puſtules of the ſmall-pox, or its malignity; and that cool air, and cool treatment, will very often ſo far ſubdue the contagion, and its fermentative proceſs in the habit, as to bid defiance to the auxiliary fever; and that when the diſeaſe becomes aggravated by the teeth, it may, moſtly, happen from a putreſcency induced by the attack or attacks of fever prior to this period; as the caſes, which I have ſeen ſo circumſtanced, were invariably accompanied with marks of putreſcency, diſcoverable by purple petechiæ, &c. according to the degrees of malignity.

These diſtinctions may be of uſe in aſcertaining a ſuitable period for inoculation, when it is to be governed by the teeth,

It

It will always be proper to defer inoculation till a tooth is cut, even although it ſhould be twelve or fourteen months before that happens, for the above reaſons.

THERE is a rule which I have invariably obſerved in the inoculation of children while they are getting teeth: it is; as the teeth generally cut regularly in pairs,* and as there is commonly a ſpace of a few weeks between the cutting of each pair, I have the child properly prepared, and take the opportunity of introducing the infection very ſoon after the cutting of a pair; by which the ſmall-pox is generally finiſhed and over in the ſpace or interval betwixt the cutting of the teeth; and the child eſcapes all pain and danger from the teeth.

DR. DIMSDALE, a gentleman who has had a long and extenſive experience, and who has publiſhed upon inoculation, ſays; he declines inoculation upon a child under two years old, where it is left to his own choice, on account of the hazards from convulſions, fevers, fluxes, teething, and other complaints, to which children are ſubject: no doubt he is directed in his opinion by the extreme of prudence; and when children can be kept ſafely out of the reach of in-

* See *Teething*.

fection

fection, it is an age as early as a cautious choice will direct: but in large and populous towns and neighbourhoods that are ſeldom free from the infection; or in other places where it may happen to prevail; it cannot be ſo adviſable to run the riſque, for ſo long a time, of taking it in the natural way; as the inoculation may be practiſed with great ſafety by an attention to the cautions above recited, at a much earlier age. There are many complaints which with thoſe of five or ſix years old would be no obſtacle to inoculation, but which would be objectionable at, or under, a year; therefore a child ought to be tolerably healthy who is inoculated ſo young.

A GOOD deal of ſtreſs has been laid upon the ſeaſons of the year beſt ſuited for inoculation. The ſpring, and autumn, have been recommended on account of their temperature; and, on that account, are proper enough; but as children, at thoſe ſeaſons, *and particularly the latter*, are more ſubject to worms, looſeneſſes, fevers, ſore throats, &c. than at any other, they become leſs eligible. Therefore, from midſummer till chriſtmas, or until the froſt ſets in, is the moſt improper ſeaſon for inoculation (ſee page 168: and the article, *raſh*). Cold ſeaſons, and particularly froſty weather, are undoubtedly more ſuitable than thoſe that are warm, damp, or wet.

WHEN

When a child is inoculated at, or above the age of five or ſix months, it will be adviſable to wean him, for two reaſons: the firſt is; that he can, if he is weaned, be better prepared by his diet than he otherwiſe could, provided his nurſe is ever ſo attentive to her own diet for that purpoſe; and he will more readily be got to take ſuch kind of drink and medicines as are proper for him at the time of the eruptive fever, or when the ſmall pox are about to make their appearance. The ſecond is; children who ſuck will ſeldom, when they ail any thing, be appeaſed or ſatisfied without they are almoſt conſtantly lying at the breaſt; and that, at night and in bed eſpecially; which muſt keep them hotter than they ought to be at that time, and which will of courſe, and as certainly, add to and increaſe the quantity of the ſmall-pox, upon the face particularly.

The advantages attending inoculation are ſo obvious, and ſo univerſally known and eſtabliſhed, as to make a recital of them ſuperfluous and unneceſſary in this place. Thoſe who are moſt converſant in it, are the beſt ſatisfied, that not the leaſt inconvenience or diſadvantage has ever really, and unequivocally, accompanied a judicious management of it; on the contrary, it is fraught and replete with

greater

greater benefit and comfort to mankind, than any meaſure ever yet adopted for the relief or prevention of any calamity, of like magnitude, the human body is heir to. Yet, although the cleareſt evidence and moſt convincing proofs are to be gathered from reaſon, experience, and the conviction of the external ſenſes, in its favour, there are thoſe to be found who are ſtrongly biaſſed againſt it, who ſtrenuouſly oppoſe it, and who even are ſtudious in depreciating it:—but no wonder—ſince mankind are, by nature, diſpoſed to differ in ſentiment; and perhaps no one poſition, which the art or ingenuity of man has been able to frame or conceive, was ever univerſally adopted, or aſſented to! Thoſe perſons who will credit and allow the conviction of their own ſenſes to decide in the matter, muſt be convinced of its diſtinguiſhed excellence, by conſidering, how much perſonal grace and beauty is preſerved by it, by comparing the preſent ſet of faces with thoſe twenty or thirty years backwards: by examining and comparing the regiſters and impartial accounts of thoſe who have been at the pains to collect them, reſpecting the fatality of the diſeaſe in the natural way, and that by inoculation: by the example of the moſt learned, and, in every reſpect, moſt eminently diſtinguiſhed perſonages in the kingdom: with

many other arguments; all, and every, of which, if conſidered without *prejudice*, would convince, where conviction will be admitted. Some there are who object to it from a religious motive, by ſuppoſing that it is interfering with the diſpenſation of the *Divine Providence*; yet they ought to conſider, that the ALMIGHTY has endowed us with powers, and has put weapons into our hands, to preſerve and defend ourſelves, and to enable us to encounter many calamities, difficulties, and dangers which, HE HIMSELF, for purpoſes beſt known to HIS unerring wiſdom, has placed in our way, and which we muſt, for our own preſervation, neceſſarily combat. Every diſcovery which HE vouchſafes to make us, it is our duty fully to reſpect, and to expreſs our gratitude for, by applying it to the purpoſe and intention it is calculated to anſwer; and which, like a *talent*, is not given us to be "*buried in the ground*;" but to be appropriated to ſuch an uſe as may diſplay the beneficence of the CREATOR, "*and declare the wonders that he doth for the children of men.*"—The aſſiſtance and power of art and medicine are eagerly ſolicited for the *prevention* and *mitigation* of every *other* diſeaſe we are liable to, without reſerve or reſtraint; therefore why *this dreadful diſeaſe* ſhould be ſingled out, and we forbidden to diſarm it of its terrors, can be

no

no more eaſily conceived than, that we ought ſupinely to ſit down under every calamity and danger which daily awaits us, without exerciſing thoſe means, for extricating ourſelves from them, which have been apparently and deſignedly given us for the purpoſe of ſo doing. Houſes have been thrown down and burnt, and lives have been loſt, by lightening; yet can it be deemed impiety to endeavour to preſerve ourſelves from, and avert the lightening's rage, by the means which the ALMIGHTY has ſuffered to be diſcovered to us, for that purpoſe?

MANY, are prevented from ſubmitting to the inoculation of their children, by fear only, who otherwiſe are diſpoſed to favour the deſign and propriety of it, and who think it right: their mode of reaſoning is; "they could wiſh to do "it, but dare not; for if any accident *ſhould* "happen, they could never forgive themſelves." If this kind of argument, which ariſes from fear, and is produced by a want of the exertion of the reaſon, was ſuffered and encouraged upon all occaſions through life, we might be continually unhappy, aud perpetually blaming ourſelves for every tranſaction which did not anſwer our expectations, although the reſult of the moſt mature deliberation. The maxim by which we ought to govern ourſelves, upon every occaſion,

is, that whatever act we commit, and whatever we do, as the result of our reason, we do ourselves the highest injustice to blame ourselves for, when the event happens not to be so favourable as our reason promised us to expect and hope for. On this account therefore, they who cannot bring their reason to coincide with the propriety of inoculation, would be to blame to submit to it: but when the reason favours it, it is an incumbent duty to comply with it, and (of course) a breach, or neglect, of that duty not so to do. It may be said, some die under inoculation? It is true such accidents have happened; but they are comparatively so small, when properly considered, as scarcely to amount to an objection. I suppose, not one in three or four hundred, in this town and neighbourhood, have died of it; and it is more than an even chance that one or more will die out of that number, in the space of time necessary for going through inoculation, of some disease, provided none of them were inoculated; and when children die under inoculation, it commonly happens from some other complaint attacking them at the same time, which might be equally fatal without the inoculation.

An apprehension of the risque of communicating some other disease along with the small-pox, has

has been alledged as an argument againſt inoculation; but experience proves clearly the futility of ſuch reaſoning; the improbability, alſo, of ſuch an event, is contradictory to reaſon and the laws of the human œconomy.

The notion in favour of taking the ſmall-pox a ſecond time, and in the natural way, after inoculation, is a miſtaken one, where the infection has before taken place *completely* from the inoculation; and can only be accounted for, like the others, from a want of knowledge and experience in thoſe who favour ſuch an opinion; or ſuch reports may be circulated as a bugbear, held out to anſwer ſome ſiniſter or intereſted purpoſe. If a perſon can have the diſeaſe a ſecond time in the natural way, he may alſo by and after inoculation; but not otherwiſe; as the diſeaſe is exactly and ſpecifically the ſame, in what ſhape or form ſoever it is received.

An account of the preparation and management under inoculation will be ſuperfluous, and can anſwer no purpoſe here, as it cannot be ſafely practiſed but under the immediate inſpection of a medical perſon: but as the ſmall-pox in the natural way will ſometimes make its attack unawares; a few cautions, reſpecting it in that ſituation, may not be unſeaſonable.

Symptoms and Treatment of the natural Small-Pox.

WHEN the ſmall-pox is in a town or neighbourhood, thoſe who have not had it are continually liable to be infected, although they may not be immediately near or in the preſence of an infected perſon; as the diſeaſe is very eaſily conveyed, to a great diſtance, in the cloaths of a perſon who has been with another in the ſmall-pox. It is not any eaſy matter to determine certainly when a child is attacked with the ſmall-pox, as no ſymptom, that occurs, pronounces it diſtinctly; however, ſome knowledge of it may be gathered by attending to the following appearances. If a child, when in good health, ſhould ſuddenly become dull, drowſy, and hot and feveriſh, with ſtartings, eſpecially when ſeeming to doze or ſlumber; the eyes heavy, and red and inflamed; a ſhort breathing, with the breath hot, and ſtrong or offenſive; a ſickneſs with vomiting; the feet cold, although every other part of the body feels hot; and the ſmall-pox is in the town or neighbourhood; the child's complaint may, if there is no reaſon to ſuſpect any other, very reaſonably

reaſonably be ſuppoſed to be the ſmall-pox, eſpecially if theſe ſymptoms do not abate in the courſe of the firſt or ſecond day: the cold feet is generally a conſtant ſymptom, and is peculiar to the ſmall-pox at and before the eruption. Sometimes ſlight ſhiverings come on at the commencement of theſe complaints. When a child is thus ſituated and circumſtanced, it will be proper to keep him very cool, and by all means from the fire: he muſt not be ſuffered to lay with his face in the neck of the perſon who carries him (which children are much diſpoſed to do in this complaint), but may be laid acroſs the arms upon a pillow, or without, and carried about the houſe, in any part of it where he can breathe a cool air: he muſt not be wrapped up warmer than uſual, and particular care muſt be taken to have his face always uncovered: at night, when in bed, he muſt be kept very cool, and not ſuffered to lay near his nurſe: in the day, he may lay upon his back acroſs the lap; or rather upon a ſettee, or ſofa, which will be cooler than the knee. As a thirſt is common at this time, if the child is weaned he may drink cold water with, or without, a toaſt in it; or milk and water, cold; whatever elſe he drinks ought to be cold, and without any wine, or other liquor of the kind, in it: if the child

ſucks, he may have the ſame drink, if he will take it. A few looſe ſtools will give very great relief, by abating the fever and relieving the oppreſſion and heavineſs; and therefore muſt be immediately procured by a little manna, infuſion of ſenna, or any thing of the like kind.*

When a child has all, or many, of the above-named ſymptoms, particularly the fever, this cool treatment can do no harm whatever the complaint may be; and, if it proves to be the ſmall-pox, will be attended with ſingular advantage and benefit; as, cold air, cold drink,

* *To the Medical Reader.*——Emetics are in very general uſe at the time of the eruptive fever; but it is agreed, by all, that their good effect is never ſo apparent as when they operate by ſtool alſo. As the operation of purgatives, at this time, is accompanied with ſuch evident and deſirable effects, it is highly reaſonable to conclude that ſuch good effect depends chiefly upon their determining to the inteſtines, and, of courſe, deriving from the ſkin. As, therefore, purgatives, cool air, and every other means that diminiſh the determination to the ſkin and promote it elſewhere, are the moſt ſovereign remedies at this period of the diſeaſe; may it not be concluded, that emetics of all kinds, but particularly antimonials, as determining to the ſkin, are not only improper, but even injurious! And may not this ſuppoſition be ſufficient to forbid their uſe, eſpecially as they are not obſerved to be accompanied with much, if any, obvious benefit independent of their caſual purgative operation?

and

and cool treatment in general, have the moſt happy effect in the ſmall-pox. Thoſe parts of the body which are kept warmeſt, are fulleſt of the ſmall-pox; and thoſe which are kept cool, have the feweſt number; ſo that the ſtricteſt care muſt be taken to keep the face cool, to prevent its being full. Thoſe parts of the thighs behind, which are covered and infolded by the arm going acroſs them in carrying a child, will always be apparently fuller than any other neighbouring part. I well remember the caſe of a young woman who I inoculated at a farm houſe, who could not be prevailed upon to keep her feet out of the warm aſhes of a hearth fire (her feet being cold as uſual upon this occaſion) at this juncture: when the ſmall-pox came out, her feet appeared each one continued bliſter, and looked as if they had been burnt or ſcalded; but which was nothing elſe than the ſmall-pox, which put on that appearance, as they increaſed and filled regularly with the pock upon the other parts of the body, and, when at the height, became intolerably painful; ſo that the girl ſuffered very much for her temerity, in theſe parts, yet ſhe had the diſeaſe very favourably in other reſpects.

It ſeldom happens that the ſymptoms abate, in any degree, till the ſmall-pox come out; which commonly happens about the third day from

from the firſt ſickening; during which time, the ſame cool treatment muſt be ſtrictly continued without intermiſſion. It is a general obſervation, almoſt without exception, that, the longer the ſmall-pox is in coming out, after the time of ſickening, the better; and that, an early eruption is as certain an indication of an unfavourable diſeaſe, as a late one is of a mild and favourable kind of ſmall-pox.—The eruption, or coming out of the pock, may be called very early when it happens with, or on the ſame day* with, the firſt ſickneſs; upon this occaſion it comes out generally very ſuddenly, and the face and breaſt are covered, as with a raſh. The ſecond day may be called early for the eruption; and when it happens on that day, the face and breaſt are commonly very full, and have the appearance of a raſh upon them. The third day is as ſoon as the eruption is to be wiſhed for: it then generally comes out more ſlowly and diſtinctly; and is oftentimes ſcarcely to be diſcovered till the fourth day. Sometimes the eruption is not to be at all diſcerned till the fourth day; when it comes out very ſlowly, and the ſpots are very

* By the firſt day, is meant, within twenty-four hours from the firſt ſickening. By the ſecond day, forty-eight hours. And ſo on.

diſtinct

diſtinct and few in number.—When the eruption happens ſo early as the firſt day, the fever and other ſymptoms ſeldom abate during the whole courſe of the diſeaſe, which may be expected to prove fatal. When the eruption happens on the ſecond day, the fever ſeldom abates much, and if it ſhould abate a little when the eruption is completed, it returns again in a few days, and much danger is to be expected, as the patient is commonly very full.—It ſeldom happens that the patient is very full when the eruption is delayed till the third day; and if he is full, the ſmall-pox are generally of a favourable kind, and the fever abates very conſiderably when the eruption is completed; and although it returns when the pock comes to be at the height, which is commonly about the eighth, or ninth day, yet it is moſtly ſlight; and he does well: when the patient has few in number, the fever goes off entirely when the eruption is finiſhed, and ſeldom returns afterwards. When the eruption is protracted till the fourth day, the diſeaſe may always be expected to be mild and favourable.

As it appears that a late eruption is accompanied with ſuch favourable circumſtances, it is very much to be wiſhed for: the means for accompliſhing, or greatly promoting it, are within the reach and compaſs of every perſon; and

and are no other than the cool treatment above-named; and they who will be prevailed upon to conform with it, may expect all the benefit and assistance which art can afford them: but it is worthy of remark, that from the time of the sickening, to that of the coming out of the small-pox, is the only time when this cool treatment can be practised to the most advantage; and that if it should be omitted then, and that period and opportunity be suffered to slip and pass, neither it, nor any other means, that can be devised, will, afterwards, be attended with any material benefit to the poor sufferer; as his fate is generally fixed, and may be determined as soon as the eruption is completed, beyond the utmost reach of art to alter.

WINE, or cordials, of all sorts are to be strictly avoided; as also warm drink; warm rooms, from fire or any other cause; and warm beds: and on the contrary, the free breathing of cool air, out of doors if the weather is not uncommonly rigorous; cold drink; and cool beds, are to be the chief dependencies.*

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* *To the Medical Reader.*——There is not in the annals of medicine any thing so extraordinary, and that reflects so severely and justly upon its professors, as a neglect of the advice and example of the illustrious Sydenham; who, more than a hundred

A FARTHER accompanyment of this diſeaſe, in a domeſtic line, is ſeldom done; and would

a hundred years ago, publiſhed his method of treating the ſmall-pox; and which, although nearly ſimilar to the preſent moſt improved and happy manner, was diſregarded until very lately. What ſtill renders this circumſtance more unaccountable, is, the eſteem in which his works have been univerſally held and acknowledged ſince his death; and that a part of his practice in the ſame diſeaſe, viz. the adminiſtering of opiates in the advanced ſtate of it, ſhould be adopted, whilſt the moſt material part, the cool regimen and treatment during the eruptive fever, was neglected.—Fourteen years after his letter to Dr. *Cole* on his improved treatment of the ſmall-pox, as recorded in his works, we find that, Mary, *queen* to *king* William III. fell a victim to the prejudice in favour of the heating regimen. Her caſe is recorded by Dr. *Harris*, in a treatiſe on the diſeaſes of children, and ſeveral other "grevious diſeaſes;" tranſlated by John Martyn, F. R. S. Dr. *Harris*, who attended her majeſty at that time, ſays; that upon all occaſions of feveriſhneſs ſhe was accuſtomed, by the advice of Dr. *Lower*, to take a large quantity of Venice Treacle (then much in vogue) on going to bed, to promote ſweating; that, on being attacked with the ſmall-pox, ſhe took larger quantities than uſual; and being of a plethoric habit, the eruption was accompanied with the moſt unfavourable appearances, of petechiæ; a copious diſcharge of blood from the lungs, and in the urine; and an efflorescence upon the ſkin, which, together with the bloody coloured petechiæ, gave the appearance of the meaſles, with which the phyſicians then (perhaps improperly) ſuppoſed the ſmall-pox to be united. She died on the night of the eighth day from the attack.

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be uſeleſs, unintelligible, and of no advantage here; what has been already obſerved, refers to that part of it which is of the moſt conſequence to be attended to; and as it often happens that the complaint is not diſcovered and underſtood by the patient's friends before the actual appearance of the ſmall-pox, the uſual appearances, and manner of treating it at this period, are of conſequence to be univerſally known and underſtood.

It is a comfortable reflection, that this once ſo formidable diſeaſe, which was juſtly conſidered the moſt dreadful the human race had to encounter, is now, in ſo great a meaſure, diveſted and diſarmed of its terrors.

It is cuſtomary, and very proper, to give a doſe of phyſic a day, or two, after the ſmall-pox have turned the height; which the beſt and moſt favourable kind will do about the ſixth or ſeventh day; the worſt and moſt dangerous ſort ſeldom turn before the eleventh day after their coming out. The eruption always appears firſt upon the face, breaſt, and upper parts of the body; and laſt of all on the legs and feet; and, when at the height, it turns firſt upon the face, and laſt of all upon the legs.

THE CHICKEN-POX is ſometimes taken for the ſmall-pox, and has given riſe to the opinion of a perſon's having the ſmall-pox twice; but although they are ſomewhat alike, yet they may be diſtinguiſhed by attending to the following appearances. A child is not ſo ill upon the coming out of the chicken-pox, as he is of the ſmall-pox; and when it comes out, the pock riſes all at once, and fills immediately with a thin, clear liquor, which always remains ſo, and does not turn white and thick as in the ſmall-pox. The chicken-pox always turns, and goes off, in three, or four days; which the ſmall-pox never does in leſs than a week; and which, of all other appearances, moſt diſtinctly marks the difference between the two diſorders; and there are no eruptions, that reſemble the ſmall-pox, which do not turn or diſappear in leſs than a week from their firſt appearance. It is ſeldom that any thing is neceſſary to be done in the chicken-pox: a doſe or two of phyſic may be proper, afterwards. It ſeldom, or never proves dangerous; and never happens more than once in the life.

The MEASLES.

THE meaſles, like the ſmall-pox, do not often attack young children, who will frequently eſcape although the diſeaſe be in the ſame houſe with them. There are particular ſeaſons of the year when the meaſles are moſt ſubject to be rife, or prevalent: the ſeaſon which is the moſt common to them, is, the ſpring.

THE ſigns, or ſymptoms, of the meaſles are, a ſickneſs; a heavineſs; a thirſt; a ſhort, dry cough, with hoarſeneſs; a ſneezing, and running at the noſe; and a running and thin diſcharge from the eyes, which appear red and much inflamed, particularly the eye-lids; ſometimes cold ſhiverings. Theſe ſymptoms are commonly ſlight at firſt, and increaſe till the meaſles come out, which generally happens on the fourth day from the firſt attack, although children will frequently be much indiſpoſed for a week before they come out. At the firſt appearance of the meaſles, they look like flea bites upon the face and neck, in diſtinct ſpots; but ſoon after, the face, neck, and breaſt, are covered in patches, reſembling a thick raſh that does not ſeem to riſe above

above the ſkin, although it may be diſcovered by the touch, and feel of the hand, to be a little prominent or raiſed upon the face and breaſt, but not upon the other parts of the body. The meaſles, like the ſmall-pox, come out firſt upon the upper parts of the body, and laſt of all upon the feet; and they obſerve the ſame progreſſive regularity in going off.

THERE is no diſeaſe, to which children are liable, that is ſo ſickly, and attended with ſo much depreſſion and dejection, as this; as it is very common for the moſt lively children to lay in a ſtupor, or ſtate of heavineſs and ſeeming inſenſibility, from the ſecond day of the attack, during the whole of the complaint, which continues three days after the firſt coming out: on the third day, the eruption begins to look paler: and, on the fourth, goes off with a mealy appearance upon the ſkin. During the whole of the complaint, there is a ſmart fever, which often, with the cough, and a difficulty of breathing, increaſe in proportion as the diſorder advances, and will ſometimes be the moſt violent and ſevere at the height, or turn, of the meaſles: ſometimes the fever, cough, and other ſymptoms, abate; and the child recovers, in part, his ſpirits ſoon after the meaſles come out; but this is not often the caſe.

A CHILD, in this complaint, muſt not be kept either very warm, or very cold: he ought not to be kept near the fire, nor yet ſuffered to breathe the cold air: it will be beſt to confine him to one room that is moderately and temperately warm; as, much warmth will increaſe his heavineſs, fever, and difficulty of breathing; and cold, and cold air, will add to his hoarſeneſs, and make his cough worſe. His drink may be water, barley water, milk and water, balm tea, or any weak liquor; but water, or milk and water, ſeem moſt agreeable to children at this time. What he drinks ought to be a little warmed, but not hot. Wine, and cordials, in all ſhapes, muſt be totally avoided.

THESE are the moſt material precautions which are to be obſerved on the firſt attack of the meaſles; and although it is not always thought neceſſary to have recourſe to medicine, and medical advice and aſſiſtance, yet they may frequently be employed to great advantage. It will always be proper to give ſomething at the beginning to procure two or three looſe ſtools; as, the infuſion of ſenna and prunes, or manna: rhubarb, in any ſhape, is not very proper. *Bleeding*, with leeches, or with the lancet, often becomes highly neceſſary, and is moſt particularly required when the cough is ſevere and violent;

violent; but, as it as been already obſerved, that the ſymptoms of fever, cough, difficult breathing, &c. are ſeldom ſo urgent at the beginning as they are at the middle and latter end of the complaint; and as the bleeding is calculated, in a particular manner, to abate and relieve the cough and difficulty of breathing; it is better to defer the bleeding until theſe ſymptoms, by their urgency, call for it. It is not here intended to give a regular and exact account of the medical treatment of the meaſles, which would be of little uſe in a domeſtic line, and might perplex and embarraſs; but as bleeding is ſo general a remedy, and ſometimes had recourſe to rather incautiouſly in this complaint, a caution reſpecting it may not be unſeaſonable, eſpecially as caſes have happened where the incautious and too haſty practice of it has been attended with unfavourable conſequences. When bleeding is uſed before or at the time of the coming out of the meaſles, it will often check and retard the eruption, and will ſometimes cauſe it to ſtrike in; the conſequences of which may prove fatal: therefore, bleeding ought to be very cautiouſly ventured upon before the ſecond day after the coming out of the meaſles, except the *real* urgency of the cough requires it, when it may be had recourſe to at any time and

period of the complaint, and will prove a ſovereign remedy.*

BLISTERS,

* *To the Medical Reader.* —— This caution, reſpecting bleeding indiſcriminately in the meaſles, is here given, as well on account of the propriety of delaying it during the firſt attack, and until the ſymptoms of cough and difficult reſpiration, by their urgency, require it, which they ſeldom do until the eruption is completed; as, to give time to diſcover, by the ſymptoms and appearances, whether the diſeaſe is accompanied with any *unuſual* degree of putreſcency; which, it is well known, ſometimes happens, and forbids a loſs of the vital fluid. For although, in that caſe, the oppreſſion upon the lungs may ſeem urgent, yet it is generally accompanied with an anxiety and oppreſſion that differs much, and is to be diſtinguiſhed from, the laborious reſpiration, with a hard, dry cough, the effect of inflammation only.—It is highly probable that the meaſles are accompanied with more or leſs of putreſcency *always*; and which is diſcovered by a fœtor of the ſtools, which exceeds that from the ſmall-pox, or any other of the common exanthemata; and as this fœtor of the ſtools, which is moſt remarkable at, and after, the turn of the meaſles, cannot reaſonably be ſuppoſed a local affection, originating in the inteſtines, ſolely from their natural contents; it muſt be referred to ſome other cauſe; and none ſeems more likely than that it may be, an effuſion from the ſyſtem, depoſited in the inteſtines, in the manner of a critical diſcharge, the effect of the fermentation produced in the habit by the contagion of the meaſles.—Appearances of putreſcency are ſometimes obſerved in the ſmall-pox; yet that ſeldom happens except in the confluent kind; and when they are diſtinct,

BLISTERS, applied between the ſhoulders or to the ſides, have been found of great uſe in abating

diſtinct, and moſt favourable, no ſymptom of the kind is to be diſcovered during the progreſs and at the turn of the pock: whereas, in the moſt favourable caſe of the meaſles, this fœtor of the fæces regularly occurs.—Why the contagion of the meaſles ſhould induce this putreſcency in the ſyſtem, more than that of the ſmall-pox, cannot be accounted for while we remain ignorant of the ſpecific qualities of contagion in general, as well as each ſpecies diſtinctly. If, in the ſmall-pox, we ſuppoſe putreſcency to be as regularly produced by the contagious ferment as it is in the meaſles, we ſhall be at a loſs farther to diſcover, from analogy, by what means, and in what manner, it is expelled the habit: the eruption and ſuppuration of the pock does not ſeem the means by which its excluſion is effected; as, the more the eruption can be reſtrained and prevented, by expoſure to the cold air and other cooling means, the more mild and favourable the diſeaſe is rendered; and even when the eruption is, by theſe means, entirely reſtrained, we are not ſenſible of any other critical or occaſional diſcharge happening in conſequence thereof. Therefore, as the good effects of cool treatment, eſpecially cold air, is ſo very apparent in the ſmall-pox, whatever the quality and tendency of the contagion may be, it ſeems as if cold air may, conjunctly with, if not independent of, the ſimple mechanical action of cold upon the ſurface, by a quality and mode of action, yet undiſcovered, have a power of ſubduing the contagion: and although it may be difficult to explain how and in what manner the contagion is acted upon by cold air, yet thus much may be determined with

ing the cough and relieving the breathing, and may ſafely be applied at any period of the diſeaſe, when the cough and breathing require it.

A FEVER

tolerable certainty, viz. that cold air has a power of limiting and reſtraining its aſſimilation with the fluids, to an extent; which extent will be governed, chiefly, by the ſtate of the fluids at the time of eruption; and, of courſe, of preventing its fulleſt putreſcent or other unfavourable effects. Hence, alſo, the eruption will be reſtrained.

THE putreſcency ſo inſeparable from the meaſles, may reaſonably be ſuppoſed the moſt formidable difficulty we have to obviate in that diſeaſe; and which it will continue to be, until chance leads to the diſcovery of a remedy, or means, capable of ſubduing it: for we do not find that any ground has been gained, or any advantage derived from the important diſcoveries that have been made in the treatment of the ſmall-pox, that will admit of a reference to the meaſles.—Purging has always been found particularly neceſſary after the meaſles, and is generally employed with the intention and for the purpoſe of draining the body of morbific matter, acrimony, or whatever elſe it may be that is the *remains* of the diſeaſe *in* the *habit*: but, from the ſenſible and inſtantaneous relief, from the fever and other ſymptoms, that is obtained, at any time after the turn of meaſles, by looſe ſtools, which are always very fœtid, it ſeems likely that nature regularly relieves herſelf by conſtantly directing this offenſive matter to the inteſtines, to be there depoſited; and that therefore our endeavours are ſeldom or never extended beyond the primæ viæ. It is obſerved

A FEVER always accompanies the meaſles, and is the cauſe of the drowſineſs and ſtupor which children

ſerved that the fever and other ſymptoms continue, very frequently with little abatement, after the turn and deſquamation of the eruption; but then, a diſpoſition to coſtiveneſs, or a want of looſe ſtools, may alſo be as conſtantly obſerved, nor will the ſymptoms abate, in any conſiderable or deſirable degree, until looſe ſtools happen ſpontaneouſly, or are procured by art: but when a looſeneſs occurs ſpontaneouſly (as often happens) or is produced by art at the turn of the meaſles, the ſymptoms rarely continue beyond that time. There ſeems little doubt, therefore, that, during the progreſs of the eruption, or at the turn of the meaſles, this acrimony is regularly thrown into the inteſtines in the manner, as already obſerved, of a critical diſcharge; that, if it paſſes off immediately by a looſeneſs, the fever and other ſymptoms diſappear; but that, while it is retained in the inteſtines by coſtiveneſs or want of looſe ſtools, it ſupports the fever, cough, and other ſymptoms, which are then only ſymptomatic from this cauſe, but which will continue, until it be removed by a natural effort of the bowels, or by purgatives adminiſtered. That this putreſcent acrimony may be retained for ſome time in the inteſtiues without exciting a looſeneſs, appears from the coſtive ſtools, which are diſcharged at and after the turn of the meaſles, being equally as offenſive and fœtid as when a looſeneſs happens. The looſe ſtools that are diſcharged at the turn of the meaſles are equally offenſive with thoſe that are retained a week or longer. As, upon many occaſions, it happens that the inteſtines are incapable of readily and effectually excluding their morbid contents without the

children always have in the beginning, and often during the whole of the complaint. Nothing will

aſſiſtance of ſuitable purgatives; ſo, upon this, they are highly requiſite, as appears by the relief they afford.

The regular occurrence of ſymptoms of inflammation does not invalidate the argument in favour of putreſcency in the meaſles, as ſizy blood, and other inflammatory appearances, are often to be obſerved at the onſet of fevers of other kinds where putreſcency is the moſt apparent.

Dr. Cullen's general obſervations on blood-letting in fevers deſerve particular attention in the caſe of meaſles. After obſerving how neceſſary bleeding is, where the violence of re-action, and a phlogiſtic diatheſis, are ſo evident as to conſtitute the *principal* part of the diſeaſe, he proceeds: "In the caſe of ſynocha, therefore, there is little doubt "about the propriety of blood-letting; but there are other "caſes of fever, as the ſynochus, and even ſome caſes of "typhus, in which a violent re-action and phlogiſtc dia-"theſis appear, and prevail during ſome part of the courſe "of the diſeaſe; while, at the ſame time, theſe circum-"ſtances do not *conſtitute* the *principal* part of the diſeaſe, "nor are to be expected to continue during the whole courſe "of it; and we know, that, in many caſes, the ſtate of "violent re-action is to be ſucceeded, ſooner or later, by a "ſtate of debility, from the exceſs of which the danger "of the diſeaſe is chiefly to ariſe. It is, therefore, neceſ-"ſary, that, in many caſes, blood-letting ſhould be avoided; "and even although during the inflammatory ſtate of the "diſeaſe, it may be proper, the evacuation ſhould not be "ſo large as to increaſe the ſtate of debility which is to "follow." *Firſt Lines of the Practice of Phyſic*, vol. I. p. 113.

Bleeding,

will ſo ſenſibly check and abate this fever, remove the drowſineſs, and reſtore a child's ſpirits,

Bleeding, although it may be ſometimes neceſſary in the meaſles, appears to be much leſs ſo than has been generally imagined, and practiſed, eſpecially with children under four or five years old: it will moſt likely be more ſo with young people, and adults, with whom the phlogiſtic diatheſis muſt be more prevalent than with children. In all the caſes of meaſles which I have attended of late years, of children of the age here named, I have not found bleeding required, and that all have done well without it. As ſoon as the ſymptoms have appeared, I have procured a diſcharge by ſtool, by medicines of which calomel has been a part; at the eruption, as the ſymptoms increaſed, I have given regularly, and daily, a ſolution of tartar emetic (as hereafter deſcribed) in the evening, which, when it has operated both ways, has never failed of procuring an obvious and deſirable remiſſion of the ſymptoms; and, at the deſquamation of the eruption, I have repeated the purgative as often as has been needful for the removal of the remaining ſymptomatic fever. I firſt conceived an opinion of the impropriety of bleeding in the meaſles, from the bad ſucceſs of others who practiſed it, eſpecially in the early part of the diſeaſe; and therefore have not found it at all neceſſary, at any period, under the circumſtances and treatment here deſcribed. It is to be obſerved, that in the above practice, no *unuſual* ſymptoms of putreſcency occurred (and which rarely accompany any febrile complaints in this town), otherwiſe, it might be found more neceſſary to reſtrain the uſe of opening medicines: however, blood-letting, in caſes of *unuſual* putreſcency, will be ſtill the more to be avoided.

as repeated doſes of the antimonial puke, No. 3. (page 158); it may be begun with on the ſecond or third day after the ſickening of the child, and after the ſtools have been procured as above directed, and repeated, once a day at leaſt, while the fever and heavineſs continue: it will be particularly proper to give it in the evening, at which time the fever is commonly moſt ſevere; and if it operates, as it generally does, both by vomit and ſtool, it will give moſt ſenſible relief; the fever, heat, and oppreſſion, will be conſiderably abated; and the child will be much more eaſy and cheerful, and more tranquil, calm, and ſettled and compoſed, than before he took it.

The fever and cough will very frequently continue, without much abatement, for a few days, or a week, after the meaſles are entirely gone; but which, the fever eſpecially, may be greatly relieved, or entirely removed, by working phyſic; a doſe of which may be given as ſoon as the meaſles are turned; and repeated once, or twice, in the courſe of a week. The ſtools, which come away with the phyſic, are generally very offenſive, and the matter of which they are compoſed is, while it is retained in the bowels, ſufficient cauſe for the fever; and it may reaſonably be ſuppoſed to be the only cauſe, when the relief, that is obtained by the diſcharge of it, is conſidered,

as

as the fever is ſenſibly ſubdued by the operation of the phyſic; and it is on this account that repeated doſes of phyſic are found ſo requiſite after the meaſles; and which they are as much, or even more ſo than after the ſmall-pox. It may always be known that the fever continues, while the dullneſs, thirſt, and want of appetite remain; and, during which time, the phyſic ought to be given, at proper intervals, if no other cauſe forbids it. It may alſo as certainly be known that the fever is gone off, when the child's ſpirits and appetite return; and which when they do, the phyſic may be diſcontinued.

The Eyes, and particularly the eye-lids, will ſometimes remain ſore, ſwelled, and inflamed after the meaſles. The cough alſo will oftentimes continue for ſome time after the fever and every other remains of the meaſles are gone. While either of theſe complaints, of the eyes, or the cough, remain, the child ought not to be ſuffered to go out of doors, or be expoſed to the cold; as the air, of a cold ſeaſon particularly, is very apt to add to and greatly aggravate theſe complaints, and may make them very troubleſome and tedious. Too much caution, therefore in avoiding cold, cannot be obſerved while there is any remains of ſore eyes, or cough. It is well known that the meaſles ſometimes leave behind them

them coughs and ſore eyes, that continue for life; a great part of which are occaſioned by the ſingle circumſtance of going out too ſoon; and which, a little caution, and ſeaſonable confinement within doors, would prevent.

When theſe complaints are confirmed, and of long ſtanding, they ſeldom admit of a complete cure: they are ſometimes relieved by iſſues, and a warm climate. Bliſters, behind the ears, and to the back of the neck, will frequently relieve the eyes, if they are not delayed too long; it will often be needful to repeat them frequently, to receive much benefit from them. It is better to ſuffer the bliſters to heal up, and to apply freſh ones, than to keep one conſtantly open by the means commonly made uſe of for that purpoſe.

Convulsions.

Convulsions are commonly diſtinguiſhed by, and divided into, the two different kinds of, outward, and inward.

Outward *convulſions* are thoſe which are attended with contractions of the limbs and body, graſping of the hands, and diſtortion of the face and features.—When they attack children

dren at, or a few days after the birth, and without any known cauſe, they generally prove fatal: upon this occaſion, a leech or two applied to the foot, will ſometimes give relief, and is the chief remedy to be depended upon; and may be repeated once, or twice, if the fits continue, and the child be luſty and ſtrong. They muſt be applied early, to promiſe a proſpect of ſucceſs. If the child be coſtive, or there be any ſuſpicion of griping, a little opening medicine, of a ſuitable quality, will be proper.

Convulsions, happening at this early period of infancy, generally terminate fatally, as depending upon a cauſe deep ſeated, and beyond the reach and power of art; and when they are violent, and of long continuance, they often leave the limbs and features diſtorted, and the faculties ſo much impaired, as to render a recovery no very deſirable event. However, when the convulſions are ſlight, a recovery will ſometimes be obtained, and that without any of the diſtreſſing circumſtances, in the ſlighteſt degree.

Convulsions may be occaſioned by the gripes,* ſmall-pox,† teething,‡ and ſome other

* See page 148, and 167. † See page 191.

‡ See *Teething*.

complaints;

complaints; when the treatment of them must be governed and directed by the particular disorder they proceed from; for as, in those cases, the convulsions are only a symptom of the disease they are occasioned by, they may be expected to abate, or increase, according as that disease declines, or advances; and it is seldom that any thing can be done for the relief of the convulsions alone, without directing the means in a particular manner to the disorder from whence they proceed: for, as has been formerly observed, "remove the cause, and the effects will cease." For example; if a child has convulsions when he is cutting teeth; set the teeth at liberty, by lancing them, and there can be little doubt that the convulsions will cease.

INWARD *convulsions*, as they are commonly called, differ very much both in their nature and outward appearances from the real convulsions just now described; and may with more propriety, as well as for the sake of distinction, be called *spasms*, or *twitchings*. This complaint is to be distinguished and known by a twitching or contraction of the mouth, nose, or any of the features, when asleep. The sweetly pleasing smiles, which are so often observed upon the countenances of infants when asleep, and which the fond mother indulges herself with the idea

of

of being the effect of pleaſing dreams, is no other than the effect of what is called inward convulſions. The expreſſions of grief, or pain, which children ſhew when aſleep, are to be attributed to the ſame cauſe; and often alternate with thoſe of pleaſure; as are alſo the ſudden ſtartings and twitchings, in that ſituation.—Theſe ſymptoms and appearances proceed from ſpaſms or contractions of the ſtomach and bowels, from wind or any other cauſe; and may be conſidered as the ſlighteſt degree of griping: few, or, perhaps, no children are exempt from them the firſt or ſecond month; and they are, of themſelves, perfectly harmleſs, although they often accompany griping and other affections of the ſtomach and bowels. They depend upon the weakneſs and delicacy or irritability of the ſyſtem, or frame, in general, and the ſtomach and bowels in particular, ſo inſeparably connected with the infant ſtate; therefore, nothing but time will ſubdue them.

RASH.

YOUNG children are very ſubject to raſhes, which ſtrike out upon every part of the body, but are moſt frequently diſcovered upon the

the face, neck, and breaſt: they commonly come out very haſtily, and diſappear as ſuddenly, in the courſe of a few days. They are very ſafe and harmleſs, nor is any thing needful to be done for them. They may ſometimes be occaſioned, when the child is wet-nurſed, by the mother or nurſe over-heating herſelf in hot weather, or by any thing which ſhe may have taken that is of a heating quality. A child is obſerved to be ſometimes a little ſick upon the ſudden diſappearance or ſtriking in of a raſh, but which commonly goes off in a ſhort time: however, if the ſickneſs ſhould continue longer than a day or two, a few of the powders, No. 1. page 151, may be given, eſpecially if there be the leaſt diſpoſition to coſtiveneſs.

CHILDREN at the breaſt will frequently have *raſhes* about the decline of ſummer, particularly in the months of *Auguſt* and *September*, which aſſume different appearances: ſometimes they differ from a common raſh, and are in prominent, diſtinct ſpots reſembling the ſmall-pox: at other times they are in larger ſpots, and like blotches. They are upon this occaſion very generally accompanied with a griping and looſeneſs, and a ſlight degree of fever. The *powders*, No. 1. page 151, will ſeldom fail of relieving theſe complaints; if they ſhould, the *antimonial puke*, No. 3.

No. 3. page 158, becomes proper, eſpecially if the child is obſerved to have any ſickneſs at ſtomach (ſee page 168). This complaint, thus circumſtanced, is derived from the mother's or nurſe's milk, occaſioned by, and the conſequence and effect of, preſent or preceding ſummer heats; conſequently may be expected, and generally is found to be moſt prevalent at the decline of ſummers that have been more than uſually hot.

SORE EARS *and* NECK, *and* CHAFEING *or* FRETTING *of the* SKIN *in other* PARTS.

FEW children, during the firſt months, eſcape a fretting of the ſkin behind the ears, and in the wrinkles or folds of the ſkin of the neck; or about the upper parts of the thighs, from the ſharpneſs of their water: oftentimes about the ſeat, in caſes of looſeneſs and ſharp ſour ſtools (page 159). Upon theſe occaſions, nothing is better than duſting the excoriated parts with white lead, as is commonly done, and having the parts waſhed with cold water and cleaned as often as may be; once every day at leaſt. Clean-

lineſs and frequent waſhing will go farther in promoting a cure, as well as preventing the complaint, than any other means; and without them all other endeavours will be fruitleſs. When the ſkin is off behind the ears, it will be proper, after duſting the parts with the white lead, to introduce a piece of thin linen rag, thinly ſpread with cerate, behind the ears every day. A piece of ſinged rag is ſometimes applied with good effect. The wearing of a coral neck-lace has its uſe in preventing the chafeing of the ſkin on the neck, as it in part abſorbs and dries up the moiſture which cauſes it, and by inſinuating itſelf among the folds of the ſkin, prevents its fretting. If theſe means do not prove effectual in healing and ſkinning any excoriated part, the following application will ſeldom fail of doing it.—Take of, *extract of lead*, and *brandy*, each thirty drops; put them into a ſmall vial, with four ounces (or eight tableſpoonful) of *water*. With a little of this, aired by the fire in a teacup, let the parts be bathed, once or twice a day, with a ſoft linen rag. If the ſoreneſs is behind the ears, or in any other part where a plaiſter can be kept on, the cerate ſpread upon a rag, as above-mentioned, may be applied after each bathing with the liquid. A ſoreneſs within and behind the ears, and a breaking out upon the face and neck,

will

will ſometimes happen at the time of cutting the teeth. See *teething*.

Sore Head.

BY a ſore head, is meant, a complaint, in ſome places, known by the name of *reef*, or *felon:* it often begins upon the forepart of the head, in large white ſcabs, which, if neglected, ſpread all over the head, and moſtly break out upon the forehead and face, in large patches, at the ſame time: it ſometimes, generally at the beginning, is dry; at other times it is moiſt, and has a thin diſcharge. Medical writers have named this complaint, *cruſta lactea*, or milky cruſt, from its appearance. The children of the lower order of country perſons, who are groſs and feeding, are moſt ſubject to it; and it ſeems to be occaſioned by a want of cleanlineſs and exerciſe, which children, who have a bountiful ſupply of ſuck, require; but to which parents, in this ſituation, are not often diſpoſed, or ſeldomer have opportunity to afford them. A cabbage leaf is a very common application, as it draws, and greatly promotes a diſ-

charge from the head, which is ſuppoſed neceſſary previous to the cure: but as ſuch a diſcharge is no way neceſſary, and as it makes the head uncommonly offenſive, it is better not to encourage it; and the ſooner the complaint is cured, the better: for that purpoſe, take of, *brandy*, and *water*, each equal parts; or one part brandy, and two of water; mix them together, and bathe the parts of the head and face where the complaint is, well, once a day, and immediately afterwards lay on a plaiſter of *epulotic cerate* (commonly called Turner's cerate) ſpread upon a linen rag, which is alſo to be renewed every day after each waſhing with the *brandy* and *water*. Two or three doſes of phyſic muſt be given during the cure. *Bathing* in the *ſea*, when convenient, and the ſeaſon favours it, will be of great uſe.—I have met with no caſes which were not readily cured by theſe means, and with perfect ſafety to the child, notwithſtanding the general practice is ſo much in favour of drawing, rather than repelling or drying, applications. If a child takes phyſic, no inconvenience can attend the early removal of the complaint, as I am fully ſatisfied of, by repeated experience.

A CHILD is liable to have this complaint in the firſt or ſecond month, or afterward: it is uneaſy to the child, and very diſagreeable and offenſive

offenſive to the ſight and ſmell. The applications muſt be continued while any remains of the diſorder can be diſcerned. If bathing in the ſea cannot be complied with before or during the cure, it will be very proper, the firſt opportunity, afterwards, to confirm the cure, and to prevent a return of the complaint. Oil-cloth (or oil-caſe) is often applied upon this occaſion; but can have no other uſe, nor anſwer any other purpoſe, than keeping the cap clean, and preventing its ſticking to the head.

TEETHING.

THE time of *cutting* the firſt teeth is very uncertain: it may happen at the third or fourth month; or not before the ſixteenth or eighteenth; yet, in general, it is about the ſeventh or ninth. Strong, thriving, healthy children commonly get teeth ſooner than thoſe that are puny and weak; yet this is not an invariable rule; as ſometimes the healthieſt do not cut their teeth before they are a year old.

THERE are *two* ſtages or periods of teething which it becomes needful to attend to: the *firſt*,

is the time of *breeding*; and, the *ſecond*, the time of *cutting* the teeth.

The firſt, or that of breeding the teeth, commonly begins about the third or fourth month; ſeldom ſooner; ſometimes later. It may be known that a child is breeding teeth, when, at or about the third month, he has a copious diſcharge of ſaliva, or ſpittle, from his mouth; is pleaſed with having his gums rubbed with the finger or any hard ſubſtance, as glaſs, coral, &c.; is more fretful and uneaſy than uſual; and is at times hot and feveriſh, with, ſometimes, ſtartings in his ſleep. Theſe are commonly the firſt and mildeſt ſymptoms or appearances of the breeding of teeth, and are what all children may be obſerved to have for ſome weeks, or months, before they cut, or have any appearance of cutting, the firſt teeth; and although many get over this period with little more difficulty or diſturbance than is here deſcribed, yet others ſuffer a great deal, and ſome loſe their lives; and this period of teething proves ſometimes as painful, tedious, and dangerous, as the time of getting or cutting the teeth. The more alarming ſymptoms are; when the fever is ſtrong, with great heat, and quick breathing; a drowſineſs and heavineſs, with frequent and ſevere ſtartings and twitchings that ſeem to threaten convulſions,

and

and which, ſometimes, do happen: this may be called the more ſevere ſtate of the breeding of the teeth. A cough, and coſtiveneſs, very often attend both the mild and ſevere ſtate. Theſe ſymptoms and appearances are readily accounted for, and depend upon the following circumſtances.—The teeth, when a child is born, are lodged within their ſockets in the jaw bones, and are covered with, and enveloped by, a thin membrane,* or ſkin, that is very irritable, and ſenſible of pain: ſo that when the teeth begin to grow and emerge from their receſſes, or ſockets, they muſt neceſſarily diſtend, perforate, and force their way through this membrane, which, when upon the full ſtretch, from its ſenſibility, gives great pain, and occaſions fever, ſtartings,

* THE *Medical Reader* will diſcover that the *membrane*, here alluded to, is the *perioſteum* proper to the teeth. The perforation and rupture of this membrane, is an event that has ſcarcely excited the attention of anatomical or other authors, either as to the time when it happens, or the circumſtances attending it. As it is very vaſcular, there can be no doubt of its having a great ſhare of ſenſibility, and that its perforation may excite pain and irritation ſufficient to produce the urgent ſymptomatic affections ſo often obſerved at this early period of dentition. If the ſymptoms of early dentition (which are conſtantly and regularly to be obſerved in a greater or leſs degree) do not proceed from this cauſe; to what other are they to be attributed?

and all the ſymptoms which happen, both in the mild and more ſevere ſtate of teething, above deſcribed. As ſoon as this membrane is completely divided in that part by the tooth or teeth which then happen to be riſing, the child is relieved, for the preſent, from the fever and other complaints; but which are ſubject to return (and which they generally do in much the ſame manner and degree) upon the ſucceſſive riſing of the other teeth: thus it commonly happens, that a child who begins this part of his teething with difficulty, continues it ſo: and the reverſe happens when he begins it favourably.

It is ſeldom that any thing particular is needful to be done during this period, of breeding the teeth, in the mildeſt ſtate of it, and when the child is tolerably free from fever and preſerves his appetite, cheerfulneſs, and vivacity, except guarding againſt coſtiveneſs; as nothing adds more to the heat and fever attending teething; and nothing, on the other hand, more ſenſibly relieves a child in this ſituation, than a looſeneſs, or looſe ſtools.

A child at this time is pleaſed with having his gums rubbed, and which he commonly is indulged in, with a view, as is ſuppoſed, of forwarding or aſſiſting the cutting of the teeth: but, at this time, it is extremely doubtful whether

ther ſuch intention can, in the ſmalleſt degree, be promoted by it, as the teeth lie too low and deep to be affected by it: however, as it is grateful to the child, is an amuſement to him, and ſeems to ſooth and lull the pain, it is right to indulge ſo harmleſs a gratification. *Coral*, or *glaſs* in the form of coral, are commonly made uſe of for this purpoſe; but care ought to be taken that they do not crack, ſplinter, or break; which if they do, and it is not timely diſcovered, the child may receive an injury from them: therefore any other ſmooth, poliſhed ſubſtance, that is not ſo liable to ſuch like accidents, as *wood*, *bone*, &c. become more eligible: a piece of half dried *liquorice root*, with the outer ſkin ſcraped off, is very proper, and often proves agreeable to the child.

Children will often get over, this part, of their teething, in this eaſy manner; yet if at any time, or at the beginning as it will ſometimes happen, that the heat, thirſt, and fever are more violent, with a dulneſs and drowſineſs, and frequent ſtartings when aſleep, with, or without convulſions, the caſe requires more particular attention. In the firſt place it is neceſſary to give ſomething that will expeditiouſly procure three or four *looſe ſtools* (if the child has not that number daily and naturally), and repeat it every day, or every other day, while the

the ſymptoms continue ſo violent: *manna*, *ſenna*, or any thing of the like *cooling* quality, will be proper upon this occaſion. Although a coſtiveneſs is very common at this time, eſpecially at the beginning; yet ſometimes a looſeneſs will come on ſpontaneouſly, which muſt not be haſtily checked, although it be ſevere. Many children have a ſevere looſeneſs, that continues, with little or no abatement, for ſome weeks, when they are getting teeth; yet it is ſeldom adviſable to ſtop, or even check it; and it is very difficult to ſay (eſpecially in this place) when, and upon what occaſions, it is proper to check or ſtop it; as there is no other occaſion in which a continued looſeneſs is attended with ſo little injury to a child, and is of ſuch ſignal uſe and advantage. It will, therefore, always be adviſable to let the looſeneſs take its courſe without attempting to ſtop it, upon all occaſions of teething, except ſomething very particular, in the child's health or conſtitution, forbids it; but which rarely happens. As ſoon as there is reaſon to ſuppoſe that the period of breeding the teeth, or a preſent fit of breeding, is over; which is to be partly diſcovered by an abatement of, and relief from, the other ſymptoms of heat, fever, uneaſineſs, and diſcharge of ſpittle from the mouth; it will be proper to check the looſe-

neſs,

neſs, if it does not ſettle without; but which will generally be the caſe. If, during the looſeneſs, there ſhould be much griping, with green, ſour ſtools, a little *magneſia* may be daily given, while theſe ſymptoms continue.

Bleeding is a remedy much to be depended on, when the ſymptoms of heat, fever, drowſineſs, and ſtartings are urgent: it is commonly done, to children, by means of *leeches*; which may be applied to the foot or feet; and may be repeated every day, or every other day, while theſe ſymptoms continue with any degree of ſeverity: two leeches may be applied, at one time, to a child about three months old; and three, to one of five or ſix months.

The mouth ought always to be examined, and if there is reaſon to ſuppoſe a tooth or teeth are near cutting, or breaking through the gum, it will be proper to lance the gum, to ſet them at liberty; for, as has been obſerved, a child *may* cut teeth at three or four months; yet it is what very rarely happens; and the lancing of the gums, before the teeth have riſen and grown into them, can be attended with no advantage to the child; as the chance of making the inciſion in the right place will always be ſo extremely uncertain and precarious, as to diſcourage the attempt.

If the child is wet-nurſed, the nurſe ought to live ſomewhat lower than uſual, at this time; and avoid much fleſh-meat. If he is dry-nurſed, he ought to have more water than uſual added to his milk; and be reſtrained from broth or animal food.

As a *thirſt* commonly attends teething, *barley-water*, with a little *ſweet ſpirit of nitre* in it, will be a proper drink: a teaſpoonful of the nitre may be put into as much barley water as it may be ſuppoſed the child will take in a day: if the child is fond of ſweet things, a little freſh *liquorice root* may be boiled in the barley water, which will make it very palatable. This drink will be proper at all times, when there is a thirſt.

Blisters, have been found of great ſervice, and may be applied, if there ſhould be occaſion, after the purging and bleeding: they are commonly, and moſt properly, applied behind the ears, or upon the back of the neck.

The *antimonial puke*, No. 3. page 158, is often attended with the happieſt effect; and may be given and repeated, while the fever continues violent. It will be moſt proper to give it in the evening. A child of four months old may take four teaſpoonful for a doſe; and one of eight or ten, a tableſpoonful.

CONVULSIONS, are very common at all periods of teething: they ſometimes come on with the firſt ſymptoms; yet are oftener preceded by ſtartings and twitchings, which may be conſidered as convulſions in the ſlighteſt degree. A child will, often, have one or two fits, and not more: ſometimes, he will have more. Many children who have convulſions with their teething do very well, although they continue for ſome time; and to others they prove fatal at firſt; ſo that it cannot be ſaid how they are likely to terminate: however, when they do happen, the means above-named, are, of all others, the moſt calculated to remove them, and ought not to be too long neglected.

MEDICINES of the *compoſing* kind have been found very uſeful in caſes of ſevere ſtartings and convulſions; as alſo in moſt of the different periods of teething: but, for obvious reaſons, the manner of giving them cannot here be named with propriety and ſafety.

WINES, *ſpirits*, and *cordials* of all ſorts, muſt be avoided in all ſhapes, as they will increaſe the fever and every other ſymptom and complaint.

A CHILD will get over the *breeding*, or a fit of breeding, of his teeth, very often ſome weeks or months before the teeth make their appearance;

ance; and will be very well and eaſy during that interval: ſo that the *getting*, or *cutting*, of the teeth is what he has yet to undergo.

The uſual time of *cutting* the firſt teeth is, as has already been obſerved, about the ſeventh, or ninth month; and, whenever it happens, the ſigns, appearances, and ſymptoms, are the ſame as have been deſcribed and obſerved at the *breeding* of the teeth, and require the ſame treatment and management, with reſpect to the *purging*, *bleeding*, *bliſtering*, &c. A child who ſome time ago was much pleaſed with having his gums rubbed, will, now, ſeldom ſuffer any thing hard to touch them; for when a tooth is upon the point of coming through the gum, the gum is exceedingly ſore, and ſenſible of pain from the ſlighteſt touch. It may be known that a tooth is near cutting, when the gum, in one particular part, where a tooth or teeth may be expected to come, appears fuller and more diſtended than uſual, and than the other parts of the gums are: the gum, in that part, looks red and inflamed at the bottom or baſe, but is paler or whiter at its point or edge; and, when the tooth is very near cutting, the edge of the gum ſeems as if it had a flat white bliſter upon it, and appears thicker and broader than the edges of the gums are in other places. If, at this

this time, any of the diſagreeable and alarming ſymptoms ſhould come on, we have in our power a remedy that will give inſtant relief;—it is, the *lancing*, or *cutting*, of the gum, by which the tooth, or teeth, are immediately ſet at liberty:—it is an operation that gives little or no pain, and ſome children even undergo it with a ſeeming gratification; and, no wonder; as they find relief the inſtant the lancet is applied to the gum, and during the operation, which is very ſhort; and when a tooth or teeth is diſtinctly diſcovered, and appears full within the gum, it will be the greateſt kindneſs done the tender ſufferer to ſet them at liberty.

If a tooth is ſo near cutting that the extreme edge of the gum appears very full and diſtended, and as if bliſtered, the tooth will, moſt likely, be diſcovered immediately upon lancing the gum. But if the tooth be not ſo forward and far advanced, it cannot be expected that it will be ſeen for ſome days, or weeks (according to the depth it lies within the gum), after lancing: for although lancing the gum takes off ſome reſiſtance which it may give to the riſing and expulſion of the tooth, yet it (the lancing) cannot be ſuppoſed to accelerate the growth of the tooth, which, at this time, and afterwards until it has acquired its full growth, is as regularly and progreſſively ſlow

as

as it was from the birth: however, this is a trifling conſideration; and if relief is obtained from the operation, by taking off the pain and irritation occaſioned by the tooth (which, in this ſituation, acts nearly in the ſame manner, and is to be conſidered and treated as a thorn, or any other extraneous ſubſtance in that or any other part of the body), an intention ſufficiently deſirable is anſwered by it. It ſometimes becomes needful to repeat this operation once, or oftener, when the tooth is not very near cutting; as the gum, from being a part that is diſpoſed to heal very readily (in a ſound ſtate), when wounded, ſoon heals up again, and, by ſo doing, renews the child's complaints; but which are always, as certainly, removed again by repeating the operation.* It is a prevailing notion that the gum, by

* Mr. John Hunter, in a valuable publication, which includes this ſubject, ſays, "It often happens, parti-
"cularly when the operation," the lancing of the gums,
"is performed early in the diſeaſe, that the gum will re-unite
"over the teeth; in which caſe the ſame ſymptoms will be
"produced, and they muſt be removed by the ſame me-
"thod. I have performed the operation above ten times
"upon the ſame teeth, where the diſeaſe had recurred ſo
"often, and every time with the abſolute removal of the
"ſymptoms." *Practical Treatiſe on the Diſeaſes of the Teeth*, page 121.

being

being cut, becomes harder, when healed again: but this is an erroneous opinion, and is founded upon ſurmiſe, and from analogy with other external parts of the body, where the ſkin, after having been cut for a length of time, forms a cicatrix or hardneſs, as is obſerved in the arm after bleeding, &c. but the texture of the gum differs ſo much from any other external part of the body, that the compariſon will not hold good; and even if it were ſo, the diſtance of time between the inciſions, is too ſhort to allow of ſuch hardneſs taking place. Experience, however, the beſt guide, informs us, that the oftener the gums are cut, upon *this* occaſion, the ſofter and more yielding they become in conſequence thereof.

CHILDREN commonly have the greateſt difficulty, and ſuffer moſt, in cutting the firſt teeth; which, if they come in proper order, are the two lower front teeth; and, next afterward, the two upper front ones; but, when they exceed the uſual time of coming, the two upper ones will ſometimes appear firſt. They *generally* come in pairs; ſo that a child *commonly* gets two at the ſame time, or near together. The eaſe or difficulty of cutting the teeth, may commonly be gueſſed at by the firſt teeth; for, according as the firſt teeth are cut with eaſe or difficulty, the

ſucceeding ones will, moſt likely, be the ſame. It is thought, by ſome, that thoſe children who are late in getting their teeth, get them with more difficulty on that account; but which is far from being a general rule.

CHILDREN have ſometimes a diſcharge from within the ears, and a breaking out behind the ears and upon the face and neck, when they are cutting teeth (ſeldom when they are breeding them). It will often be difficult either to ſtop the running from the ears, or to heal the breaking out upon the face and neck; nor does it appear eligible or ſafe ſo to do, eſpecially when a child has much fever, as it may be a means of adding to and increaſing the fever. If the breaking out upon the face, or behind the ears, ſhould not heal when the fever goes off, and the tooth or teeth, which were then about coming, are cut, but which it commonly does, it muſt be treated in the manner as deſcribed page 232.—If the running from within the ears continues in like manner, it will be moſt adviſable to let it take its own courſe, without attempting to do any thing by way of ſtopping it.

TEETHING is very properly ranked with the number of alarming and fatal complaints that children muſt neceſſarily undergo; and, from what has here been obſerved, the period of *breeding*

ing the teeth muſt be (as it is), very often, more tedious, and becomes ſometimes as dangerous as the time of *getting* or *cutting* them; and which happens chiefly from the means we have in our power being more ready and effectual in giving relief in the latter than in the former inſtance: for while the teeth lie deeply buried in their ſockets, they are out of our reach; but when they project full in the gum, as they do at the time of cutting, we can adminiſter ſafe and immediate relief by a trifling inciſion in the gum.

Teething may always be conſidered dangerous, in proportion as the heat, fever, cough, drowſineſs, or ſtartings are more or leſs violent. *Convulſions* are, upon this, as upon every other occaſion, to be conſidered as a dangerous ſymptom; although many children, who have them, do very well. The lancing of the gums, at the time of cutting the teeth, deſerves particular attention; it is too often neglected from want of attention, or is prevented by the parent's fears, which are imaginary and groundleſs, as the child can ſcarcely be ſaid to ſuffer pain by the operation. It ſeems aſtoniſhing what a length of time, and how much a child will ſuffer in teething, and yet do well; and what becomes an agreeable reflection, is, that the child's health and conſtitution is not hereafter impaired by his ſufferings.

It has been obſerved above, that a child commonly gets his teeth in pairs, and it ſeldom happens that he gets more than two teeth at once; conſequently it is reaſonable to ſuppoſe that he breeds only two at one time: but as it now and then happens that a child cuts four or more teeth at the ſame time; ſo, a child may breed that number at once; hence it muſt and does happen, that a child will ſuffer in proportion to the number of teeth he is breeding or cutting; and that a child, who with great difficulty gets over the breeding, or cutting, of a pair of teeth, can ſcarcely be expected to overcome two or more pairs, when they all come together, or in very quick ſucceſſion; and when children die of teething, either at the time of breeding, or cutting, it moſt commonly happens that the number which is coming exceeds one pair; and upon this occaſion it is not unuſual to find a child ſo much reduced and exhauſted, that although he is able to ſupport and get through the cutting of one, or two pairs of the teeth which are coming; yet that he will be overpowered by, and ſinks under, a greater number.

RICKETS.

THE RICKETS is known and diſcovered by an unuſual enlargement of the head and joints, particularly the knees, elbows, and wriſts; a crookedneſs of the limbs and back; a pale ſickly countenance; frequently a cough and difficult breathing; a hardneſs and ſwelling of the belly; and a diſlike to motion and exerciſe.

THE appearance of the rickets may be diſcovered ſo early as the fourth or ſixth month; and when it happens ſo early, the firſt ſign or ſymptom of it, that is generally obſerved, is, from the child's head, which ſeems larger than it ought to be. Much about the ſame time, the joints of the knees and wriſts appear to be ſwelled and enlarged: and the child is very dull, and ſeems better ſatisfied with lying ſtill than being moved or toſſed about. In a few months afterwards, the legs and arms, and, ſoon after that, the thighs and back appear crooked, and ſeem ſhortened. During all this time the child ſeldom ſhews a diſpoſition to put down or make uſe of his feet and legs; and when he is brought to reſt upon his legs, they may be obſerved to become ſtill more crooked.

The Cauſe of the Rickets.

THE RICKETS may be occaſioned by the child's weakneſs; which weakneſs may be either, natural to his conſtitution; or, brought on by diſeaſe, or any defect, fault, or error in nurſing. Some children are ſo puny, and have ſuch weak frames and conſtitutions, from their birth, that ſome appearances of the rickets are not to be avoided and prevented; yet by far the greateſt number of caſes which we ſee of it are chiefly, or altogether, brought on, and increaſed, by improper or bad nurſing. By improper nurſing, is to be underſtood, all thoſe errors in diet, exerciſe, &c. which the parent or nurſe may have committed through ignorance or improper indulgence. And by bad nurſing, is meant, a want of cleanlineſs, proper exerciſe, &c. from indolence and inattention in the parent or nurſe. But the greateſt number ſuffer from what may be called bad nurſing, as we find the caſes of rickets moſt frequent with the children of the poor, whoſe parents have ſeldom more inclination than leiſure to take proper care of their children: and with thoſe who are under the care of hired nurſes, who, often wilfully neglect diſcharging,

charging, with juſtice, the taſk they have undertaken; and who, while a child is tolerably quiet, will ſuffer him to lay upon the bed or in the cradle the greateſt part of his time, without a proper change and ſupply of clean, dry things about him; and without being taken up, carried into the air, and ſhaken and toſſed in the arms, as a child ought to be at a proper age: or when, by the child's own exertion, he is able to ſtand upon his legs, he is left to ſcramble by himſelf; or is placed by a chair, where he is ſuffered to ſtand for many hours together, except he has ſtrength enough to enable him to make a ſhift to move from one chair to another, of his own accord.

THIS is a true picture of what very frequently happens with thoſe children who are nurſed out; and the only means that can be taken to prevent it, by thoſe parents who are reduced to the neceſſity of parting with their children, is, to have them ſo near at hand that they can daily inſpect the nurſing; and never to ſuffer them to go a great diſtance off, except where the fulleſt confidence, from their own, or the experience of others, can be placed *(ſee the note to page 133)*.

A CHILD may become crooked in his back by being conſtantly carried in one arm (ſee page 126) or by an accident, without being rickety.

The cure of the rickets may be gathered from, and diſcovered by, the deſcription which has been given of the cauſes and ſymptoms of the diſorder. When it proceeds from a diſeaſe, or any defect in the child's conſtitution, ſuch diſeaſe or defect muſt be remedied, or removed as much as poſſible. And when it is occaſioned by improper, or bad nurſing (which is the moſt common cauſe), that muſt be more ſtrictly attended to and narrowly inſpected by the parents or friends.—Cold bathing in the ſea, or in freſh water, is, of all others, the remedy moſt to be depended on. It may be begun with at any ſeaſon, and ought to be continued as long as the child appears to receive benefit from it. Two, or three doſes of rhubarb may be given previous to the bathing, and repeated now and then during the time of bathing. The bathing may be diſcontinued, at any time, for a while, if it ſhould appear neceſſary, and begun with again.

The ſeaſon of the year, proper for bathing in the open ſea, or a cold bath, is confined to a very few of the ſummer months: yet if cold bathing is thought neceſſary, even in a cold ſeaſon, it need not be declined on that account, as it may be practiſed, to great advantage, by means of a tub in the houſe, with either ſalt or freſh water; and if the child is to begin bathing

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in a cold ſeaſon, the water may be a little aired, ſo as to take off the extreme cold, by means of a ſmall quantity of hot water put into the cold, at firſt, and which may be gradually declined until it be uſed quite cold. But if a child begins bathing in the open ſea, or a cold ſpring, late in the ſummer, he may continue it, as long in the winter as bathing is thought neceſſary, in perfectly cold water, either in that manner, or in a tub at home; as he will not be ſenſible of the increaſed coldneſs of the water, if the bathing be continued, conſtantly, from the beginning.

The medicines that are moſt commonly given in the rickets are, the *bark*, and preparations of *ſteel*; but as the doſes, and form and manner of giving them, will require to be much varied upon different occaſions, they cannot here be named with any degree of propriety, or a proſpect of advantage.—When the legs are much bent, they may, while the child is young, ſometimes be much aſſiſted by external mechanical means.—When the deformity is in the back, it is uſual to put pads and cuſhions in the hollow or depreſſed parts, to hide the deformity; but which ought by no means to be done with children, or young people while they are growing, as they add to, rather than prevent or leſſen, the deformity. There is, upon this occaſion, a method

a method of ſuſpending a child by the chin and back part of the head, for ſome time, every day; it does not hurt the child, and will ſometimes be of ſervice when the deformity is in the back or ſhoulders, eſpecially if it is begun with in time and while the child is young, and perſevered in long enough.

THE *remedies* which are in general adminiſtered for the relief of the rickets, are thoſe of the bracing and ſtrengthening kind, as *bathing*, the *bark*, &c. as above-named: and which become proper and neceſſary, as the complaint depends upon, and ariſes from, a weakneſs; which, as has been obſerved, may be either natural or conſtitutional, or brought on and acquired by improper or bad nurſing; therefore as ſoon as the firſt ſymptoms of the complaint are obſerved, the means, here recommended, ought immediately to be put in practice, to prevent a farther progreſs of the calamity; by which means the unpleaſing appearances, here named, may commonly be removed, and the child may be reſtored to his ſpirits, health, and juſt figure and proportion; but which cannot be obtained ſo perfectly, when the complaint is ſuffered to go on and become confirmed; although, in that ſituation, very great help will ſometimes be procured. A doſe of rhubarb, of ſuch ſtrength as

to

to procure three or four looſe ſtools, ought to be given now and then, and particularly when the child is hot and feveriſh, which is very uſual in this complaint, and alſo during the bathing, as above-mentioned.

Cough, Difficulty *of* Breathing, *and* Asthma.

CHILDREN, in the month, are liable to coughs, with obſtruction at the breaſt and difficulty of breathing, occaſioned by expoſure to cold; either improperly and imprudently; or through neceſſity or by accident.

A child may be ſaid to be imprudently and improperly expoſed to cold, when he is not carefully kept cloſe and warm by a ſtrict and regular confinement to the bed and room (as adviſed and directed page 45), particularly in cold and damp weather, but is expoſed to the air by being frequently carried out of the room into different parts of the houſe, or out of doors.

Cold may be ſaid to happen by accident or neceſſarily, when there is a real occaſion for the child to be expoſed to the air for want of a warm

warm room or other conveniences within doors; being unavoidably carried out of doors; or when, from reſtleſſneſs, occaſioned by the gripes or any other cauſe, he is much out of bed, in the nights and in cold weather eſpecially.

When the cough is ſo ſlight that it does not give the child much diſturbance, and that he breathes tolerably free and does not ſeem much ſtuffed at his breaſt, it is ſeldom that any thing is particularly required for it, except keeping the child ſtrictly cloſe and warm. But if the cough becomes very teazing and troubleſome, is hard and dry, and the child appears to have pain in coughing, accompanied with a ſtuffing at his breaſt, and uneaſy, laborious breathing, it will be proper, if he is a ſtrong child, to apply a leech to one of his feet; and he may take the following medicine to eaſe and looſen his cough. Take of, *ſperma cæti*, eight grains; rub it very well in a marble mortar with a little *ſugarcandy*, and a teaſpoonful of *mucilage of gum arabic* (which is made by diſſolving gum arabic in as much hot water as will form the conſiſtence of oil): to theſe add three grains of *ſalt of hartſhorn*, and as much *water* that has boiled, as will make the whole mixture two ounces, or four middle-ſized tableſpoonful; of which a child in the month may take two or three teaſpoonful every ſix hours. It is a palatable medicine.

This

THIS complaint, when to exceſs, is alarming and dangerous; and the danger is increaſed by children not having knowledge or power to aſſiſt themſelves in getting up the phlegm. When the phlegm ſeems looſe (which often is the caſe when the cough has continued ſome time, never at the beginning) and the child is not able to get it up, it will be adviſable to give an eaſy puke, which will bring up the phlegm, and the child will, by that means, be conſiderably relieved from his cough and difficulty of breathing.

THERE is a kind of cough and difficulty of breathing which children are ſubject to, that differs very much from this we have been treating of, and ſo much reſembles the *aſthma* of grown perſons, as not to be diſtinguiſhed from it. It is generally diſcovered very ſoon after the birth of the child. It does not attack ſo ſeverely as a common cough: nor does the child ſeem to have ſo much pain from the cough, yet appears ſtuffed, and as if he would be ſuffocated at each fit of coughing; and has a difficulty of breathing at other times, eſpecially when he is toſſed or haſtily moved: in ſhort, the appearances are every way the ſame as in a grown perſon with the *aſthma*. He will often take the breaſt, or other food, as if nothing ailed him. If his cough, but

particularly

particularly difficulty of breathing, increaſe upon him, as often is the caſe, he does not ſeem to thrive and get forward, but is overcome by them, and dies, commonly, at about three months old. On the contrary, if his cough and difficulty of breathing do not increaſe, he ſometimes thrives and looks tolerably, and ſeems pretty eaſy when kept ſtill, quiet, and warm; but if expoſed to the cold, or haſtily moved, his cough and appearance of ſuffocation return accordingly, and are proportionally violent; on which account he is deprived of the benefit of air and exerciſe, in a great meaſure, particularly in cold weather. A child's life in this ſituation is not to be anxiouſly deſired, as recoveries are ſo exceedingly ſlow and doubtful. I had occaſion to ſee a child, in whoſe fate I was much intereſted, ſupport this complaint fifteen months, at which period he died.

I HAVE obſerved this complaint to be moſt common with the children of the poor; from which there is little doubt that it is moſt commonly occaſioned by cold caught by the child at the birth, or very ſoon after (ſee page 54).

ALTHOUGH this is a complaint that can ſeldom be entirely removed, yet it will admit of relief at thoſe times it is moſt urgent; as, like the *aſthma*, it is better and worſe by turns. For general benefit

nefit and relief, a clear air, free from fogs and the ſmoke of a town, will be found to anſwer a deſirable purpoſe: alſo large, airy rooms, that are dry, in every ſituation.

When it happens, from cold or any other cauſe, that the cough and difficulty of breathing are more than uſually increaſed, a puke will give ſenſible relief: and when they are to exceſs, a leech, or two, according to the child's ſtrength, to the foot, or a bliſter between his ſhoulders, becomes neceſſary.

If the child is dry-nurſed, food that is thin, as the milk and water (page 85), and now and then a little veal tea, will be found to agree better with him in reſpect to his breathing, than that made thick with bread, &c.

To the Medical Reader.——The *peripneumonia notha*, or an infarction of the lungs, is a diſeaſe not attributed to infants by many authors. Dr. *Hugh Smith*, in his *Formulæ Medicamentorum*, upon the diſeaſes of children under the title of *peripneumony*, briefly obſerves: "An infarction "of the lungs and difficulty of breathing in chil- "dren is a complaint of a dangerous, and many "times of an irremediable kind."

From the preceding deſcription of this diſeaſe, it appears to differ widely from the *ſpaſmodic* aſthma of children, treated of by Mr. *Millar* and others;

others; and to be no other than the real *humoral aſthma.* Dr. *Cullen* in his *Noſology*, notices the diſeaſe treated of by Mr. *Millar* as; "*Aſthma* "*Infantum*, *Millar* on the Aſthma and Chin-"cough." He alſo inſerts: "*Aſthma Infantum* "*ſpaſmodicum*, *Ruſh*, Diſſertation." I have not ſeen either of the publications: but as theſe diſeaſes are claſſed in the Noſology with the *Pyrexiæ*, under the order of *Phlegmaſiæ*, and *Genus* of *Cynanche*, (Cynanche *trachealis*) it is probable they both differ entirely from the diſeaſe here given.

It is very likely that this aſthmatic affection of children is more prevalent in Liverpool than in many other places; and which is perhaps to be accounted for, from a diſpoſition which there is in the ſituation to favour pulmonic complaints: as the air is very ſharp, and the changes of temperature very great and ſudden. A ſtranger ſeldom eſcapes a cold upon coming to it; and many who have never had colds with coughs before, have had them to exceſs upon being here in the winter. The *acute rheumatiſm*, which is very prevalent here, is a proof of the keenneſs of the air.*

This

* To this ſharpneſs of the air, and the ſandy ſoil which every where ſurrounds this town and prevents the ſtagnation of

THIS diſeaſe, as above obſerved, is moſt commonly met with in the children of the poor who inhabit cellars; and, as it is obſerved ſoon after birth, it without doubt is occaſioned by cold caught at or ſoon after the birth. As theſe cheerleſs ſituations admit of but few indulgences, the tender ſufferers have little chance of overcoming ſo formidable a complaint, and commonly ſink under it at or before the third month.

IT is now and then to be met with in the children of the leſs needy; when it, no doubt, is occaſioned by the ſame cauſe, from the negligence or inadvertency of the nurſe. Theſe children however, by future care and indulgences, generally ſurvive it longer than thoſe of the

of rain and other waters by affording them a ready abſorption, we are no doubt indebted for its healthineſs; for which, independent of the two complaints above-named, it is not perhaps to be exceeded in the kingdom, eſpecially, when it is conſidered, that it is the ſecond in ſize. As a proof of its ſalubrity, putreſcency is a circumſtance that very rarely occurs in febrile or any other complaints, even with the pooreſt. Nervous fevers are as rare; and agues ſeldom met with. See the concluſion of the note to page 218.

DR. DOBSON in his ingenious *Medical Commentary on Fixed Air*, when deſcribing its effects in putrid fevers, obſerves, page 23: "Putrid fevers rarely acquire any great "degree of malignancy in Liverpool, or its neighbourhood."

poor; ſome, when it is ſlight, recover altogether; but others, when it is to exceſs, are overcome by it.—The child, above-named, who died in the fifteenth month, appeared to have his death haſtened by a ſevere attack of the *gravel*, which he voided in ſurpriſing quantities, and which appeared to be occaſioned, or greatly promoted, by his inactivity; he not being able to bear a ſuitable degree of exerciſe. He was perfectly formed externally; as were all the other children I have ſeen with the complaint.

THE WORMS and CHIN-COUGH, as being complaints that are extremely rare with very young children, cannot properly be ranked with the diſeaſes of early infancy; and of courſe will not be here fully and regularly diſcuſſed. I have named them, ſolely to give an opportunity of cautioning parents againſt giving very frequently and freely ſuch things, by way of medicine, as they have continually recommended to them; by which childrens conſtitutions ſuffer often very materially, ſometimes irreparably.

TANSY juice is often given very liberally for the *worms*, and is generally eſteemed an innocent, ſafe remedy: yet this, and many other ſuch

ſuch like ſtrong bitters, by frequent uſe, have greatly injured the ſtomach and bowels, and have done more miſchief, on that account, than any uncertain benefit which might be obtained from their uſe, reſpecting the worms, can poſſibly compenſate.

ALOES; and *Anderſon's pills*, which are made entirely of aloes, and that generally of the worſt kind; are commonly given for the worms. There is perhaps no complaint which happens to a child for which *aloes*, as a medicine, is ſuited, or becomes needful. And there is no medicine, which is uſually given to children, that is ſo improper for them, and which, by repetition, is ſo likely to injure their conſtitutions. It is by much too rough and irritating for the tender bowels of children, and impairs their proper tone and power of action. It is as ill ſuited to their bowels, as ſpirituous liquors are to their ſtomachs; and is attended with much the ſame injurious conſequences.

THE *Chin-cough* is a diſeaſe that has hitherto in a great meaſure eluded the art of medicine: and as it oftentimes proves very ſtubborn, and gives way very reluctantly, it frequently becomes an object of domeſtic ſkill and management. But as none of thoſe familiar domeſtic means have ever been *really* ſerviceable, they are better

(eſpecially what is made uſe of as medicine internally) omitted. When the complaint takes a favourable turn, it is frequently attributed to the means that were laſt uſed; hence, that means is, ever after, recorded as infallible.—As it is a diſeaſe of the ſpaſmodic or convulſive kind, it has been ſometimes relieved, or even removed, by a ſhock or ſudden fright:* thus; riding upon a bear (a frightful mode of travelling no doubt,) from the fright it occaſions, has been ſaid to be ſerviceable. Giving the patient a part of ſome diſguſtful animal, as a mouſe, &c. to eat, and afterwards informing him of it. And ſo forth.—By way of medicine, the antimonial puke, No. 3. page 158, given every or every other evening, as there directed, will often greatly relieve the complaint, and cauſe the fits of coughing to be leſs ſevere and frequent.

Of WEANING.

THE time of weaning children, generally is chiefly governed by, and depends upon, the ſtate of the mother's or nurſe's milk. A

* *To the Medical Reader.*——Is electricity, in any mode, likely to relieve this diſeaſe?

child

child is ſeldom weaned ſooner than the eighth or tenth month, when the mother or nurſe is capable of ſupplying him for that length of time; and it ſeems to be as long a time as can, in general, be neceſſary for a child to ſuck, or proper for the nurſe to give ſuck, conſiſtent with her own health. If a child is thriving, and gets a tolerable good ſupply of ſuck, for three or four months, he will ſeldom ſuffer materially in his health by being weaned at that time; ſo that, ſo circumſtanced, there need never be any heſitation about weaning a child at that, or any other early age, when any particular occaſion requires it.

The moſt material circumſtances to be attended to in weaning, are; the child's taking of food; and the ſtate of his bowels. If he is inclined to feed well with the ſpoon, and his bowels are ſettled, ſo that he is tolerably free from fits and attacks of griping and looſeneſs, he may be weaned at any time with the greateſt ſafety. But when, on the contrary, the child ſeems much averſe to feeding with the ſpoon, or has frequent attacks of griping and looſeneſs, the weaning is not likely to prove ſo favourable, and is better deferred, when it can be done, a while longer. Theſe are circumſtances very neceſſary to be attended to in weaning.

There are ſome diſorders to which children are liable, in which it will be better for them to be

weaned; namely, the ſmall-pox (ſee page 198). At the time of cutting the teeth, a heat, fever, and thirſt, often prevail ſo much as to render ſucking of no advantage at the time to the child, and very teazing to the nurſe; as the child is deſirous of being perpetually at the breaſt, which heats him, and often prevents his taking cooling liquors and other things that might be very ſuitable and proper. It is not here meant that children ought to be always weaned when they are cutting teeth; but only, that it is no diſadvantage to them to be weaned at thoſe times.—It is univerſally known, that the ſooner a child is weaned, the more eaſily it is effected on the part of the child.—When a child is near a year old before he is weaned, he ſeldom parts with his favourite food and amuſement, the breaſt, without ſome difficulty and regret; yet he may readily be made to quarrel with it, by putting ſomething upon the nipple that is bitter, and of courſe diſagreeable to him, and which at the ſame time will not harm him; a little ſoot, or aloes, are often made uſe of upon this occaſion, and which the child no ſooner taſtes than he commonly looks very ſhy at the breaſt, and ſeldom is inclined to touch it again; but which if he ſhould be, his diſlike to it may be ſtill farther heightened by a repetition of the ſame means

It will, upon all occaſions, be adviſable, when there is time for it, to accuſtom the child to feed freely with the ſpoon, for a ſhort time before he is weaned; which will not only bring him to take his food with more pleaſure, but will alſo give an opportunity of diſcovering how, and what kind of, food agrees beſt with him. When a child is weaned ſo early as the third or fourth month, a more ſtrict attention to his food will be required than if he is weaned later, or at the tenth or twelfth. If a looſeneſs and griping ſhould come on, they muſt be treated as above deſcribed, ſee page 150 on griping and looſeneſs; and if a coſtiveneſs ſhould happen, it may be relieved as mentioned above, ſee page 113 on coſtiveneſs.

Of the MANAGEMENT *of* PREGNANT *and* LYING-IN WOMEN.

AMONG the number of improvements which have of late years attended and been the reſult of medical enquiries, what relates to the management of *lying-in women* ſtands with the foremoſt and moſt diſtinguiſhed; notwith-

ſtanding which, the practice is ſtill much ſhort of the perfection it is capable of, and is very confined and limited in its application.

It is not much to be wondered that diſcoveries upon this ſubject are only of a recent date, when it is conſidered, that the practice was formerly very confined; and it was ſtrictly enjoined by cuſtom, that the management of women in this ſituation was to be entirely confined to their own ſex, and which commonly fell to the lot of the moſt unpoliſhed and illiterate.

There would, no doubt, be a good deal of propriety in reſtoring and reſtricting the practice altogether to the female ſex, if women of credit and abilities would be at the pains to acquire a competent knowledge of what relates to it; but which has not hitherto been attempted; nor, perhaps, never may; as it is a purſuit which has been, and moſt likely will long be, conſidered as incompatible with female manners and education: for, ſuch a general knowledge of the ſtructure and œconomy of the human body, with its relative diſeaſes and affections, are ſo intimately connected with it, that without both a diſtinct and united knowledge of them all, and which can only be obtained by the proceſs of a regular education, it would prove very defective.

Such parts of the practice as have been ſubmitted entirely to the care of men, are brought

to

to a great degree of perfection: yet what concerns the direction and management after delivery in lying-in, they have not been able to direct ſo minutely and effectually as might be wiſhed, at all times, and are ſeldom allowed to dictate, except when danger threatens; or if they do, their advice is not properly noticed, or is thought ſuperfluous and unneceſſary.* This moſt commonly is the caſe in large towns, where nurſing is conſidered as a regular profeſſion, or buſineſs; and where thoſe who profeſs it are generally ſo bigotted, and jealous of any incroachment upon their ſuppoſed privileges, as very unwillingly to ſubmit to any inſpection into, or alteration from, a courſe which they think time and cuſtom has

* Mr. White, after deſcribing the treatment of lying-in-women as it is commonly practiſed, obſerves: "I believe it will appear that many of the moſt important errors do in reality prevail, and this I impute in great meaſure to the large ſhare which nurſes have in directing the management of lying-in women, to whoſe interference practitioners muſt, in ſome meaſure ſubmit, though contrary to their better judgement." *Treatiſe on the Management of pregnant and lying-in Women*, page 11.

He alſo, in another place obſerves: "I know likewiſe the difficulty there is in bringing patients to conform to proper directions, and the ſtill greater one in inducing nurſes and other attendants to follow the rules which are preſcribed them." Page 149 *of the ſame Treatiſe.*

eſtabliſhed

eſtabliſhed to a degree of perfection approaching to infallibility; and many a *London* nurſe would ſooner give up her profeſſion than her caudle.*

This improper influence is very frequently exerciſed upon women of the beſt ſenſe; who, as they acknowledge, are often inclined, or compelled, to ſubmit to many things for the ſake of conforming with what they are told is the cuſtom, although their own reaſon and inclination would direct them otherwiſe. Nothing, therefore, but a little exertion on their parts, and proper information from others, is wanting to enable them to act concluſively and determinately for themſelves.

The deſign of the following obſervations is purely that of expoſing the inconſiſtencies which have prevailed, and ſtill continue to prevail, altogether, or in part, in many places, to the great diſadvantage and injury of thoſe who are obliged to ſubmit to them; and, of ſetting forth, and explaining, ſuch improved rules and methods as are conſiſtent with reaſon, and have been confirmed by experience; whereby the ladies may have an opportunity of detecting the errors which they are liable to have impoſed upon them; and may be enabled to determine and judge, upon moſt occaſions, for themſelves.

* See the 14th page.

Rules

Rules and Cautions, proper to be attended to, during Pregnancy.

Of Blood-letting.

AS ſoon as a woman is convinced of being with child, it is a common practice with her to get *bled*, from a ſuppoſition that it is not only ſafe, but proper and neceſſary.

MEDICAL authors and practitioners are not perfectly agreed as to the general propriety or neceſſity of *bleeding*, upon this occaſion: ſome conſtantly adviſe it, and others think it better entirely omitted. When the matter is impartially conſidered, and directed by experience, it will appear, that no general and invariable rule can be adopted in favour of either opinion: it being, in ſome caſes, neceſſary; in others, not ſo; and perhaps in a few, hurtful.

THE rules for determining this matter are nearly as follows.—When bleeding is *neceſſary*, it is commonly found to be ſo between the ſecond and ſixth month; and if at any time, during that ſpace of time, there is a ſenſe of heavineſs or weight, or a pain in the head, with thoſe

thoſe eſpecially who are not much ſubject to complaints of that kind at other times; or, a pain in the back or hips, either conſtant, or often recurring, and which does not ſeem to abate, or go off, in a few weeks; bleeding will, under any, or all, of theſe circumſtances (as they may all happen at the ſame time), be adviſable; as, moſt likely, it will be found to remove or greatly relieve them; and without which they ſometimes will continue for weeks, and even months, without any abatement; and are very troubleſome and depreſſing. Bleeding once, will generally be ſufficient; but if the pains and uneaſineſſes ſhould return, it may ſafely be repeated at any time, eſpecially if relief is found from the firſt bleeding.

These pains and uneaſineſſes are moſt common of the firſt child, leſs ſo of the ſecond; and many who have them of the firſt and ſecond, have little or no return of them afterward.* The delicate

* *To the Medical Reader.*——Theſe varieties in the ſymptoms of pregnancy may perhaps, in a great meaſure, be accounted for by referring them to the laws of the animal œconomy, which are frequently much biaſſed and influenced by habit. In the firſt pregnancy, a material change is to take place in the ſanguiferous ſyſtem, and which occaſions the ſymptoms; that being once overcome, as the veſſels muſt

delicate are as ſubject to them as the more healthy and ſtrong. When none of theſe ſymptoms of pain and uneaſineſs occur, or when they are only in a ſlight degree, bleeding is *unneceſſary*, can do no good, nor can any advantage or good purpoſe be expected from it; therefore it is much better let alone.

Sickneſs, and Heartburn.

THESE are complaints which frequently come on very early in pregnancy, and are very troubleſome and teazing. The *ſickneſs* commonly abates about the third or fourth month; although it ſometimes continues longer; and now and then it comes on, at intervals, during the whole time of pregnancy.

NOTHING that has yet been diſcovered ſeems to relieve or abate it much for the firſt two, three, or four months; which is conſidered as the time of breeding: but if it ſhould continue, or return, after that period, the following preparation will ſometimes greatly relieve it.

muſt be ſuppoſed to reſume their former ſtate, nearly, before another pregnancy, the ſymptoms and effects in future may become gradually reconciled and ſubdued by habitude and repetition: the ſymptomatic affections of nauſea, ſickneſs, &c. more eſpecially.

The

The Acid Mixture.

No. 4. TAKE, of *loaf ſugar*, an ounce and half; put it into a quart bottle of *ſpring water*; when the ſugar is diſſolved, put in two teaſpoonful of the *acid elixir of vitriol*, and ſhake the bottle well. A teacupful of this may be taken twice a day, at leaſt, in the middle of the forenoon and afternoon, or when the ſtomach is moſt empty. It is very palatable, and may be made to ſuit the taſte, by increaſing or diminiſhing the quantity of the ſugar, at pleaſure. If it agrees, relief will be found from it before the bottle is finiſhed; when it may be repeated, and continued as long as benefit is obtained, or until the ſtomach becomes ſettled.

IF there is a coſtiveneſs, it muſt be relieved by the means proper for that purpoſe, immediately following.

THE *heartburn*, and a *ſourneſs* upon the ſtomach, often accompany the ſickneſs, and are very ſubject to continue, at times, during the whole pregnancy. *Magneſia* is a favourite and very ſuitable medicine for them, and generally affords a preſent relief. *Coſtiveneſs* will always add to them. The *acid mixture*, No. 4. juſt now mentioned, will ſometimes relieve them, as the cauſes

cauſes of the ſickneſs and heartburn are nearly allied.

These ſymptoms, of *ſickneſs* and *heartburn*, are, like thoſe pains of the head and back juſt mentioned, commonly more troubleſome and tedious of the firſt child, than of a ſecond, or others afterward.

Coſtiveneſs.

A *coſtiveneſs* is very common in pregnancy; and although it may happen at all times of it, yet is moſt uſual and ſtubborn at the latter part. It ought conſtantly to be guarded againſt, and may often be removed and prevented by the diet; and any thing which, in the diet, is found to be looſening, may be often taken.—*Vegetables*, and ripe fruits of all kinds, where they agree, are very ſuitable for the purpoſe; but ought not to be indulged in ſo as to produce, what may be called, a looſeneſs. If an attention to the diet ſhould not anſwer the intended purpoſe, recourſe muſt be had to medicine.—*Lenitive Electary*, when it will have the deſired effect, is as proper as any thing; but it is ſeldom effectual enough. *Magneſia* will ſometimes anſwer, although but ſeldom.—The *liquor* which is obtained by infuſing, or boiling, of *ſenna* and

prunes

prunes in water, will generally be found very effectual, and is far from being unpleaſant.—*Caſtor oil*, with thoſe who can take it, anſwers very well; it ſeldom gripes: from half a table-ſpoonful to a tableſpoonful may be taken for a doſe: the moſt eaſy and agreeable method of taking it, ſeems to be; to put it into a cup or glaſs of water, and ſwallow it in the manner of a raw egg.—*Rhubarb* is improper, as it leaves the body as coſtive, or more ſo, than before.

Diet.

It is of no little conſequence to pay a regard to the *diet* during pregnancy; as the advantages, to be derived from ſuch an attention, will repay the trouble (if it may be ſo called) of it. Thoſe who propoſe nurſing their children themſelves, will be particularly benefited by it, as it will be a means of promoting and increaſing the quantity of their ſuck; and the ſuck will be more likely to agree much better with the children: the children will be more likely to be healthy and free from complaints, and thrive well: and, laſtly, they may reaſonably propoſe to themſelves a better and more ſpeedy recovery from lying-in, free from fevers and feveriſh complaints, alſo gathered breaſts, &c. &c.: for the

diet

diet upon this occaſion may, as in the ſmall-pox, be conſidered as a proper and neceſſary preparation, and is nearly, if not fully, as advantageous in this as in the preparation for the ſmall-pox. (See child-bed fever, and gathered breaſts.)

No particular rule or form of diet can be fixed upon or invariably purſued; as different conſtitutions, habits, and manner of living, will always require and call for ſome variety: however, what in general ought to be, and may be, upon all occaſions obſerved, is; a *ſimplicity* in the diet; which conſiſts in, avoiding ſtrong, rich food, as, made diſhes, or food of any kind that is naturally ſtrong and heating, or rendered ſo artificially by ſpices, high ſeaſoning, and other heating things. Wine, and other heating liquors, ought to be ſparingly indulged in; and the quantity which has been uſually taken, ought to be leſſened, rather than increaſed.

A DIET that is light and eaſy of digeſtion, and which is chiefly compoſed of vegetables, is moſt ſuitable. The appetite will oftentimes call for many things that ſeem inconſiſtent, unſuitable and out of the way, and which there ſeldom is any harm in gratifying, in a limited degree; yet that ſeldom continues beyond what is commonly underſtood by the period of *breeding*; however, when it does exceed that time, there

can be no harm in complying, in ſome meaſure, with what may be ſuppoſed the dictates of nature, although theſe fancies may be indulged to too great an exceſs, and ought *always* to be reſtrained, rather than encouraged, eſpecially when they ſeem very much out of the way.

The benefits attending a *ſimplicity* of diet are very fully diſplayed in country women, who enjoy good health themſelves, and have the comfort and ſatisfaction of diſpenſing that invaluable bleſſing to their offspring;—the beſt gift that can be beſtowed by a parent!—and which parents of this claſs are indebted for to this *ſimplicity*, which their ſtations and ſituations impoſe upon them; aided by exerciſe and pure air, to be immediately ſpoken of.

To conceive a proper idea therefore of conducting the diet upon this occaſion, the farm-houſe may not be improperly conſulted and attended to; and which may in part, and as far as cuſtom, habit, conſtitution, and other circumſtances, will admit of, be copied and imitated to ſingular advantage.

In mentioning the diet of a hired wet-nurſe, page 136, it is there obſerved, that butter-milk and cheeſe-whey are conducive to ſuck. They may be both taken to advantage at this time, if they are liked and agree; and in ſuch quantities as are agreeable to the perſon who takes them, and are found

found to agree with the health. Their uſe is, at this time, attended with great advantages; as it may not only diſpoſe the mother to have an increaſed quantity of ſuck for her child; (a deſirable circumſtance if ſhe propoſes nurſing!) but will alſo be a means of preparing her for paſſing through her lying-in with greater ſafety to herſelf, free from fever and feveriſh ſymptoms: the child will alſo be materially benefited by it with reſpect to his future health and thriving.

Butter-milk and whey cannot be ſaid to diſagree when they lay eaſy and light upon the ſtomach, and do not occaſion coſtiveneſs (which rarely happens), griping, or looſeneſs, in a conſiderable degree. They both ought to be taken as freſh as poſſible; the whey warm, if ſo liked; and if the butter-milk ſhould be, from its thickneſs or coldneſs, too cold or heavy for the ſtomach, it may be thinned by the mixture of a ſuitable quantity of warm water that has boiled, but which is not ſo hot as to curdle or break it; which will ſometimes make it ſit eaſier upon the ſtomach. Theſe, when they can be had good, are conſidered as articles of luxury by the inhabitants of large towns.*

Exerciſe.

* As *cheeſe-whey* may be made equally as well in town as country, the method of preparing it, as it is not generally

 underſtood,

Exerciſe.

EXERCISE may properly be conſidered a needful requiſite during pregnancy. It gives health, ſtrength and ſpirits, and will moſt eſſentially contribute to, and aſſiſt in, an increaſe of ſuck; a circumſtance the moſt deſirable with thoſe who nurſe their children themſelves!

underſtood, may not be unacceptable to ſome.—Take a piece of runnet or calf's ſtomach (which is commonly to be had of the butchers, who properly prepare it for the purpoſe) of the ſize of a ſhilling, or leſs; put to it a table-ſpoonful or two of cold water, and let them ſtand a few hours, or over night, in a cup. Put new milk upon the fire till it be about blood warm: then pour it into a baſon, and put to it the water poured clear off from the runnet: keep them in about the ſame heat for a few minutes, when a ſeparation of the curd and whey will take place; and by cutting or breaking down the curd with a knife or ſpoon, the whey may be poured from the curd, and may be taken then, as it will be of a proper warmth. The above quantity of runnet, or *ſteep* as it is frequently called, will be ſufficient for a quart, or more, of milk; half the quantity for a pint; and ſo on. If too much *ſteep* is put in, it gives the whey an unpleaſant, acerb taſte: if too little, the milk will not break at all. If the milk is either too little or too much heated, the conſequences will be the ſame as when too little or too much *ſteep* is made uſe of.

THE

The chief objection that has been made to exercise during pregnancy, is, the danger and risque of miscarriages; but which is an opinion by no means well founded; as miscarriages, in general, will be much more prevented than promoted by exercise; for as they happen most frequently with those who are of delicate, nervous habits, or who lead sedentary, inactive lives; and with those of weak constitutions; whatever will give strength, and will assist the constitution, will, as certainly, and of course, prevent them; and every one knows that exercise is one of the first and leading requisites of health, and is always a chief means by which it is to be acquired and preserved. However, as exercise, like every other necessary and convenience in life, becomes useful or injurious, according as it is managed and directed; so some caution is requisite in the direction of it upon this occasion.

The quality or kind, and the quantity and degree, of exercise, ought always to be regulated by, and proportioned in a great measure to, what the person, who is to take it, has been accustomed; as, what would be very moderate exercise to one person, would be excessive fatigue to another; and they who are accustomed to walk much, or be frequently upon horseback,

will find very little exercise in a carriage. The person, therefore, who is to use the exercise, ought to have her choice of the method; as, no doubt, what is her own choice, will not only be accompanied with the most pleasure, but will also be done with more ease, and to greater advantage. It is the abuse and mismanagement of exercise that does harm and is to be guarded against at this time, and not the judicious use of it, which will ever answer the best and most desirable purposes.

The evident advantage and superiority in point of wet-nursing which the more laborious part of the world (in the country especially) have, depends in a great measure upon the free exercise they enjoy in the open air; as there are many ladies of good constitutions, and no way indolent, who yet, from the very little free exercise in the pure and open air consequent upon a town life, prove very defective in their nursing, although they may be very desirous to accomplish it: and there is little or perhaps no doubt if their situations and all circumstances would admit of a country situation, with suitable exercise (and proper diet) during the greatest part of their pregnancy, they would be much more able to effect so desirable a purpose.

With respect to this subject, it may be necessary only farther to observe in general; that exercise

exercise may be begun with and continued during the whole time of pregnancy, or when, and as long as, it will be acceptable, and can be borne with ease and pleasure. It never ought to be to excess, nor accompanied with much hurry and fatigue; and ought to be always proportioned and suited to the persons own disposition for it, and the habitual practice and mode of exercising she has been accustomed to; as excessive exercise, and such as is unusual and disliked, may do more harm than good.

It will of course follow, that, walking, or riding on horseback or in a carriage, may, singly, or all by turns, as the fancy and other circumstances will direct and admit, be practised to advantage.—A journey, when it can be conducted with ease and pleasure, can never be more seasonable, and may be taken any time before the seventh month; much later than that will hardly be thought prudent.

It is scarcely necessary to observe that the degrees of exercise ought to be lessened and confined in proportion as the pregnancy advances; as, what would be an agreeable and salutary recreation in the third or fourth month, will, in general, be found an unpleasant fatigue in the seventh or eighth. The seventh month is as long as, perhaps, the more laborious and fatiguing

exercises ought ever to be continued: and every good purpose to the constitution, both present and future, that is to be had, will be obtained at, or before, that period, provided the exercises are suffered to commence early enough.

Cold Bathing.

Cold Bathing answers most of the good purposes of exercise; and when exercise cannot commodiously be complied with, it will be a good and desirable substitute, when the season of the year will admit of it, and there is the convenience of a situation near the sea, or a bath of fresh water. When neither of these are to be obtained, a tub with cold water will do very well.

The bathing may be begun with as soon after the pregnancy is discovered as is convenient, and may be continued till the sixth, or seventh month, at intervals, and as it agrees. Three or four times in the course of a fortnight is as often as will in general be needful, although it may frequently be practised oftener with great safety, and to advantage.

Cold bathing, like exercise, assists greatly in promoting suck, generally gives strength and spirits, and is admirably calculated to prevent miscarriages

miſcarriages with thoſe of ſedentary, inactive lives, or who are weak, delicate, or nervous, from any cauſe, and ſubject to miſcarriages. They who are ſtrong and healthy, and uſe exerciſe, will not often be benefited by it, as they ſeldom ſtand in need of ſuch like aſſiſtance.

It cannot always be practiſed with perfect ſafety by thoſe who have an habitual cough and pain in the ſide, and thoſe who are conſumptive or ſo inclined: however, it ought not to be ventured on in thoſe caſes without proper advice.

The advantages attending cold bathing are derived from its ſtrengthening and bracing qualities; whereby, a delicate or weak conſtitution is aſſiſted and reſtored to a more perfect ſtate of health; and, by which, it is enabled to perform and go through with the taſk and duty impoſed upon it, more completely and perfectly.

The ſummer months that are thought warm enough for bathing, are few, and conſequently bathing in the ſea, or in a freſh ſpring, cannot, very often, be done at a time when it may be required. However, that inconvenience may be remedied with great ſafety, by a tub of water, which may be uſed in the houſe, even by the bed-ſide if neceſſary; and, if the ſeaſon is rigorous, it may be a little aired by putting a kettle, or two, full of hot water into it for a few times

at

at firſt; but which may be gradually leſſened until it can be borne perfectly cold.

If it be found proper and neceſſary to begin the bathing in the open ſea, or cold bath, late in the ſummer, it may be continued during the ſucceeding cold weather, in the ſame manner, or by means of a tub of water in the houſe, perfectly cold; as the increaſed coldneſs of the water will not be ſenſibly perceived, if the frequent bathing be duly continued.

Oil-case caps, which of late are come much into uſe in bathing, are to be recommended: every good purpoſe is anſwered as well with, as without them; and no advantage can attend wetting the hair; on the contrary, wet hair is not only uncomfortable, but alſo may and does frequently occaſion the head-ach, and will be liable to give cold. Theſe objections to wetting the hair become ſtill increaſed, when bathing is practiſed in a ſeaſon that is not very warm.

Sea *water*, when it can be conveniently had, is preferable to *freſh water* for the purpoſe.

It may be remarked in general with reſpect to bathing, that when the idea or ſhock of the water impreſſes, and is accompanied with, an unuſual terror, it is better avoided until the terror abates; but when it can be accompliſhed, with but a ſlight degree of fear, it need not be avoided.

Of

Of MISCARRIAGES.

THE cauſes of *miſcarriages* may properly be divided into three in number.

THE *firſt*, and moſt common, is; a weak, relaxed, or delicate habit of body and conſtitution; as proceeding from, or much increaſed by, a ſedentary life without much action or exerciſe.

THE *ſecond* is; fright, with, or without external hurt or injury, as a fall, great fatigue, &c.

THE *third* is; an over fulneſs of blood, which moſtly accompanies a ſtate of high health and a ſtrong conſtitution; but it ſeldom happens from this cauſe alone without the concurrence of the ſecond, or fright, a hurt, a fall, fatigue, &c.

THE moſt frequent cauſe of miſcarriages is, as here obſerved, a weak, relaxed, or delicate habit and conſtitution, the frequent concomitants of a ſedentary, inactive life; ſo, they are found to be the moſt common with thoſe in eaſy circumſtances, whoſe ſituations or inclinations do not prompt them to much exerciſe and bodily exertion, eſpecially without doors and in the open air;

air; as no cuſtom or habit tends more to weaken and relax the body, and, of courſe, impair the conſtitution and bring on a train of nervous ſymptoms, than an habitual confinement within doors without the uſe of free exerciſe in the open air. A good conſtitution will ſometimes bear ſuch confinement for a long time without much apparent injury; but a conſtitution that is naturally rather weak or delicate, will always be made more ſo by it.

Miscarriages, from this cauſe, may happen at any period of pregnancy, but are moſt common about the third or fourth month: they often come on ſpontaneouſly, and without any apparent external cauſe, ſuch as, a fright, a fall, &c.; and thoſe who have once had them are ſubject to them afterwards, at or about the ſame period of pregnancy. As this cauſe and occaſion of miſcarriage is a weakneſs of body and conſtitution; whatever will ſtrengthen and reſtore the body to a ſtate of health, will undoubtedly be the likelieſt means of preventing miſcarriage. Theſe ſalutary purpoſes are beſt anſwered by exerciſe, properly conducted (ſee page 282); and, particularly, by cold bathing, as above-named (ſee page 286).

Cold bathing is attended with the moſt happy and deſirable conſequences, and too much cannot

cannot be advanced or urged in favour of a remedy that can be ſo eaſily obtained, and which, by experience, is found to have the advantage, and to claim the preference of any other upon this occaſion. Suitable exerciſe, therefore, and cold bathing, are the dependences.*

BLEEDING will very ſeldom be required; it may oftentimes do harm, and ſhould not be done except when the occaſions named in page 273 par-

* CONFINEMENT, and reſt, were formerly thought eſſential requiſites during pregnancy, to prevent miſcarriages: however, that doctrine is now much exploded in this kingdom; perhaps more ſo than upon the continent; as we are informed the queen of France, during the whole of her firſt pregnancy, was not permitted to ſtir out without being carried in a litter, or by the moſt ſtudied eaſy conveyance, to prevent, no doubt, a miſcarriage.

THE modern moſt approved medical writers, of our own country, are unanimous in their recommendation of exerciſe and cold bathing upon this occaſion. Mr. *White*, upon this ſubject, ſays: "I have known ſhort rides on horſeback "repeated daily procure ſucceſs, when total confinement "would not; and have for a great number of years been "ſenſible of the good effects of cold bathing, not only in "preventing miſcarriages, when every other method has "been likely to fail, but other diſorders which are incident "to pregnant women, and generally attendant upon a weak "lax fibre," or frame or conſtitution. *Treatiſe on the Management of pregnant and lying-in Women*, page 68.

ticularly

ticularly call for it. Bleeding will ſeldom put a ſtop to a miſcarriage when it is coming on.

Rest, and cloſe confinement, are, by ſome, ſtrictly enjoined, moſt particularly about the time the miſcarriage is expected and uſually happens; but which will not at all prevent it; and the exerciſe and bathing may as ſafely and properly be continued at this time, as at any other.

It ſometimes happens that a miſcarriage threatens, and the ſymptoms afterwards go off, or abate; when, the bathing, and exerciſe, may be properly uſed, and become particularly requiſite to prevent a return of the ſymptoms.

Miscarriages which have here been obſerved to happen from the ſecond cauſe, as a fall, a fright, &c. are not liable to happen at the ſame period upon a future occaſion, without a renewal or repetition of the ſame accident; which no doubt will always be guarded againſt; and no other means of prevention ſeems neceſſary to be here particularly diſtinguiſhed, farther than what has been already obſerved. If the perſon, who has met with ſuch an accident, be of a weak, delicate conſtitution, or ſuch a habit and diſpoſition as above deſcribed, cold bathing, with ſuitable exerciſe, will be the beſt preventives.

The *third*, and laſt, *cauſe* of miſcarriage which has been here noticed, is very rare; and, when it happens,

happens, is with the ſtrong and moſt healthy; and then, moſt commonly, in conſequence of an accident, as a fall, &c. or great hurry and fatigue. In this caſe, bleeding, and avoiding too great exertion or fatigue, will be proper.

When the real ſymptoms and appearances of a miſcarriage are come on, it is oftentimes a difficult matter to prevent it; and if a ſtop is put to it for the preſent, the perſon ſeldom goes to her full time. But the ſymptoms, or ſigns, of miſcarriage are often miſconceived; and what are frequently ſuppoſed to be ſo, are not ſo in reality; which leads to a deception; therefore it will always be proper to make a juſt diſtinction upon this occaſion, before any means are made uſe of.

It is almoſt needleſs to obſerve that when the *real* ſymptoms of miſcarriage are come on, the moſt perfect reſt and compoſure, both of body and mind, are to be obſerved while the ſymptoms continue.

Miscarriages become dangerous, or otherwiſe, according to the circumſtances which attend them. *Thoſe* that happen under the third or fourth month, and which are common at that period with perſons of weak, delicate, &c. habits and conſtitutions, and come on without any other known cauſe, are very rarely attended with danger,

ger, and ſeldom require more than a few days confinement. *They* are not often accompanied with much danger before the ſixth month: but, at any period between that and the full time, they are more ſo.——*Miſcarriages* that happen from fright, or any urgent, violent cauſe, are, at all times, to be conſidered as more alarming and dangerous than thoſe which come on without any known cauſe, or a very ſlight one. A flooding has always been juſtly dreaded: it ſcarcely ever becomes dangerous at, or about, the third or fourth month, although it will then be, ſometimes, what may ſeem great and exceſſive. If it happens to exceſs after that time, particularly after the ſixth month, it becomes alarming, and the moſt ſpeedy aſſiſtance becomes abſolutely neceſſary. If a miſcarriage happens without a flooding, or with only a ſlight and moderate degree of it, the danger is much leſſened and removed at any time or period, and there is ſeldom any at all to be apprehended.

A PROPER degree of confinement to the bed, the room, and the houſe, will be needful after a miſcarriage; yet that confinement ought not to be unneceſſarily prolonged and indulged, nor heat, nor heating things be made uſe of. The ſooner the benefit of the air can ſafely be obtained, the better; and the rules and cautions which here-

hereafter are adviſed in lying-in, will be applicable to this occaſion.

REAL miſcarriages, and ſuch as may properly be ſo called, and which are ſuppoſed to happen in the earlier periods of pregnancy eſpecially, do not happen ſo frequently as is imagined; as what are ſuppoſed to be real miſcarriages, are very often falſe conceptions.*

IF the NIPPLES are waſhed with brandy, every night at bed-time, for a month or two before delivery, it may be a means of preventing a trou-

* *To the Medical Reader.*——Falſe conceptions are moſt frequent and common, as I have obſerved, with thoſe who are of delicate, weak habits; or are ſickly, or unhealthy, from any cauſe: from which, it is highly probable and reaſonable that they happen chiefly, or altogether, in conſequence of a defect, ariſing from a weakneſs, and want of power and ability in the ſyſtem to forward or complete another taſk which was intended or begun; viz. the formation or perfection of the fœtus. I am farther confirmed and ſtrengthened in this opinion, by obſerving, that thoſe who have been ſubject to ſucceſſive falſe conceptions, have, upon bathing, and making uſe of ſuch other means as tended to ſtrengthen the body and conſtitution, eſcaped them, and have afterwards had children.

THEREFORE, in caſes of falſe conceptions, the ſame means of cold bathing, exerciſe, &c. may be made uſe of, and are moſt likely to ſucceed in preventing them, as have been recommended in miſcarriages ariſing from the firſt cauſe, or a weak and delicate habit and conſtitution.

bleſome ſoareneſs, to which they are very frequently liable, upon giving ſuck.

In noticing the difficulty that often attends inducing children to take the breaſt, page 117, among the number of cauſes there aſſigned, the *nipples*, from their *unfavourable ſhape*, is obſerved to be the moſt common. This obſtacle, of *unfavourable nipples*, preſents itſelf moſt frequently with thoſe in better life, and is rarely met with in the laborious and thoſe in inferior ſtations; depending upon the manner of wearing and lacing the ſtays; as tight lacing over the breaſts, ſo much practiſed by the former, is the ſole cauſe of it; which not only deſtroys the natural beauty, ſhape, and proportion of the breaſts and nipples, but depreſſes and flattens the nipples, and ſinks them into the breaſts, ſo much, that they are not without difficulty, and cannot ſometimes be got out at all. Strange! that faſhion ſhould ſo frequently become the enemy of nature, and ever be the bane of health!— Many ladies who are deſirous of ſuckling their children, and have ſuck ſufficient, are prevented doing it by this unfavourable circumſtance of the nipples: no doubt, therefore, was the cauſe of it generally known, parents would more frequently guard againſt it with their daughters at a proper and early period. The breaſts from

long

long and continued compreſſion, are often rendered incapable of performing the office intended them by nature; hence one cauſe of the want of ſuck with thoſe of this deſcription.

Cautions in Dreſs.

Tight lacing is prejudicial at all periods of pregnancy, but more particularly at the latter parts. A ſupport from the ſtays will no doubt be always requiſite; yet tight lacing is ſeldom borne with eaſe, and may have an injurious tendency.

In the latter months of pregnancy, the cloaths, by their weight, oftentimes give conſiderable uneaſineſs: to remedy which, if a part of them and the pockets are ſewed or otherwiſe faſtened with tapes, &c. to the ſtays or jumps, and the ſtays provided with ſhoulder-ſtraps, ſo that the weight of the whole may chiefly hang or be ſuſpended from the ſhoulders, a deſirable relief will be obtained.

Jumps are moſt commonly worn at this time; yet the *buckles* and *ſtraps*, with which they are faſtened, make them aukward and troubleſome. There are ſome upon a different conſtruction, that are much more commodious. Inſtead of buckles and ſtraps, the fore-parts of the ſtays are

made wide enough to pin over the ſtomacher, both at top and bottom, at firſt; and, as the pregnancy advances, they ſtill pin over at top, but to the ſtomacher down the ſides and at the bottom. Theſe foreparts, that pin over and to the ſtomacher, are without bone. The ſtomacher is made in the uſual manner.—The preſent extreme faſhion of the ladies ſtays, which makes the waiſt very ſhort and ſlender, is highly improper for this ſituation; and were ladies to know the injuries they are liable to ſuſtain from it, they would, ſurely at this time, ſacrifice the tranſient gratification of a fluctuating faſhion to future permanent eaſe and health.

Rules and Cautions after Delivery, and in Lying-in.

THE treatment of lying-in women has been, till very lately, univerſally founded upon a general ſuppoſition, that from the moment of delivery, and for a certain length of time after, they could not have too frequent and plentiful a ſupply of warm liquids, cordials, and nouriſhing food in the form of gruel of different ſorts made with ſpices, with the addition of wine,

wine, or ſpirits; and that an unuſual degree of warmth and ſweating was to be produced and kept up by it, and farther ſupported by the warmth and cloſeneſs of the room, cloſe confinement to the bed, and an additional quantity of bed-cloaths. All this was done with a view of ſupporting and recruiting the ſtrength and ſpirits, and keeping off cold and its effects. However, theſe opinions and practices are diſcovered by experience to be ill founded and erroneous, and to create the very evils they were intended to leſſen and obviate; and their prevailing ſo long cannot perhaps be accounted for more probably than has been already attempted, page 270.

The impropriety and diſadvantage of this warm and heating method of treatment, depends chiefly upon the following circumſtance.

There is, from the time of delivery, a conſtant and particular propenſity and diſpoſition to fever and feveriſh heat and ſymptoms, which gradually increaſes the firſt three or four days; and more danger is to be apprehended from this fever (ſee child-bed fever) and its conſequences, than any, or all, the other complaints which are liable to happen at this time. Whatever will add to the heat of the body, will increaſe and alſo prolong this fever; and which nothing is

more calculated to do than wine, ſpices, cordials, and liquids of all kinds taken hot; with an unuſual warmth of the bed and cloſeneſs of the room. A perſon, of either ſex, in the higheſt health, if placed in ſuch a ſituation, and under ſuch a regimen, would moſt likely have a temporary artificial fever brought on by it: it is very eaſy to conceive, then, how much the fever will be promoted and aggravated, with all its conſequences, by ſuch treatment, in a ſituation where there is a natural inclination to fever.

A *coldneſs* and *ſhiverings* very commonly accompany all feveriſh complaints, and are of courſe very common at this time; which may have led to the notion of warmth and warm things being proper by way of preventing them, and removing them when preſent: but this is a falſe and miſtaken opinion; for whatever brings on the fever, may be ſaid to bring on the ſhiverings alſo; as the ſhiverings will not come on, if the fever is kept off: and when the ſhiverings are actually preſent, the moſt heating things will not ſhorten or abate them, in ſuch a manner as to be productive of any good; and no more than a moderate warmth ſhould ever be employed, or is ever requiſite, for that purpoſe.

The *ſweating* which is brought on by this warm treatment, has alſo been ſuppoſed neceſſary

to

to prevent, or carry off, any degree of the fever, and to prevent the ſhiverings; but which is a notion as fallaceous as the other; as it not only ſerves, when in exceſs, or long continued, to ſupport and increaſe the fever, but, alſo, renders the fever, by prolonging it, much more dangerous and tedious, and exhauſts the ſtrength and ſpirits.

Those who lie-in are ſenſible how liable they are to be overheated by the moſt trifling heat of the room or bed, or by taking any thing warm; at which time they feel very uncomfortable and uneaſy to themſelves; often have the head-ach; and perceive a faintneſs, wearineſs, and depreſſion of ſpirits; all which continue, and are increaſed, according as the heat and heating things are repeated; and are the ſymptoms of the feveriſh complaint here mentioned.—On the contrary, they who are never ſuffered to be overheated by the warmth of the bed, room, or what they take, ſeldom or never experience theſe diſagreeable ſenſations, but feel comfortable and eaſy to themſelves, and find their ſtrength and ſpirits increaſe apace; all which deſirable circumſtances, with many others, are entirely effected by ſubduing and keeping off this feveriſhneſs by cool treatment.

The public has lately been favoured with ſome publications upon the advantages attending

this cool treatment of lying-in women, and one in particular by Mr. *White* of *Manchester*;* a performance that does the author great credit. They are all addreſſed to the faculty, therefore not calculated to find their way, or become very general, in private uſe.

THERE is great reaſon to believe that this improved method of treating lying-in women had its origin at *Edinburgh*, and was at firſt diſcovered, as many of the moſt important diſcoveries are, by accident. Dr. *Young*, profeſſor of midwifery in that *Univerſity*, appears to have the merit of firſt obſerving and propagating it, as ſeems probable from the following circumſtances.

THERE is a long, ſpacious, loſty room (called a ward) in the *Infirmary* at *Edinburgh*, not much connected with the reſt of the houſe, and ſet a part for the reception of poor women for the purpoſe of lying-in, particularly in the winter ſeaſon, under the direction of Dr. *Young*. The room is entered, by folding doors, at one end; and the fire place is placed, exactly oppoſite, at the other end; the beds, about ten or twelve in number, are ranged, at a good diſtance from each other, down each ſide of the room; by which means, as the door is generally left open, even in the winter, the air is freely admitted and

* The author formerly quoted.

paſſes

paſſes in a current conſtantly through the room, which the beds, from their ſituation, partake of nearly all alike. The womens diet is, as may be ſuppoſed, plain and ſimple. As a good many women are admitted every ſeaſon, they are ſeldom permitted to ſtay longer than there is a neceſſity for; ſo that at, or about, the forthnight end is the time they uſually go away; when it is common for them to take their children and *walk* to their reſpective homes, perfectly recovered.

SHOULD it be ſuppoſed that the people, eſpecially of the poorer ſort of that part of the kingdom, are, from their natural hardineſs, more capable of enduring hardſhip than the Engliſh conſtitutions; it may be obſerved; that the indulgences and manner of living of the inhabitants of Edinburgh is much ſimilar to that of other large towns in the more ſouthern parts of the kingdom; where many poor women, from confinement and other cauſes conſequent upon having a number of children, are very delicate; and many of the women admitted there, were, as I frequently obſerved, of weak and delicate conſtitutions. I have alſo conſtantly obſerved elſewhere, and ſince I had an opportunity of attending the practice in that place, that weak and delicate conſtitutions are the moſt ſenſibly benefited by a cool treatment, and that heat, or heating things,

ſickens

ſicken and diſagree with them much more apparently than with thoſe of ſtronger conſtitutions.

The doctor obſerving theſe women recover ſo much better, and more readily, than thoſe in his private practice (a great many of which latter were of high rank and nobility,) was led to ſuppoſe it muſt chiefly depend upon the free admiſſion of air, and cool treatment; and was thereupon induced to try that method in his private practice; and he found it anſwer his wiſhes. The opportunities he had, as public profeſſor in the Univerſity, of diſcloſing this important diſcovery, enabled him to publiſh it to the world, confirmed to them by practice; and it has made a progreſs as quick as any thing ſo novel, and oppoſite to an old eſtabliſhed cuſtom, generally does. It is a method I adopted from this authority, and which I have invariably recommended during fifteen years, with the moſt complete ſucceſs, and without the loſs of a ſingle patient in the month, or in lying-in.

The following rules and directions are ſuch as experience will warrant and recommend, and as will be found to agree with all conſtitutions, ranks, and ſituations in life, with a very little variation; and which nothing but ſome very uncommon circumſtance need ever prevent the complete practice of.

It is an univerſal cuſtom, immediately after delivery, to give ſomething *cordial*; and, for that purpoſe, *ſpirits*, as brandy, rum, &c. not diluted, or very little ſo, with water, frequently with grated nutmeg in them, are given. This practice has obtained the ſanction of long and ancient cuſtom, and is founded upon the prevailing notion, of keeping out cold by heating things. Something, no doubt, is neceſſary, after the fatigue of labour, to reſtore the exhauſted ſtrength and ſpirits; yet as raw ſpirituous liquors are, to a great many, highly diſagreeable, and, with thoſe that are unaccuſtomed to them, may produce a temporary intoxication, with great heat, pain in the head, &c. they are much better entirely omitted at this time; except when they are preferred through choice; and then it will be adviſable to mix them with, at leaſt, one half, or two parts, water. *Wine*, when it is liked and is agreeable, is to be prefered to all other cordials upon this occaſion; and a glaſs or teacupful of foreign wine, as maderia, &c. will be very proper, and may be taken ſingly, or mixed with warer, moderately warm, in the manner of negus; or it may be taken in a little gruel. But when ſpirits and wines of all ſorts are diſagreeable or unpleaſant, there is no neceſſity for forcing any thing of the kind againſt the inclination; and a little gruel

gruel only, of ſuch kind as is moſt agreeable, and without ſpices, moderately warm, may be taken in lieu of them.

A *ſhivering*, or rather *trembling*, often comes on at this juncture, which, as it is occaſioned by the agitation and fatigue of labour, will very ſoon ſubſide by reſt, and by keeping ſtill and quiet; the cordials were, alſo, given with a miſtaken notion of preventing this trembling.

If, as it ſometimes happens, that the mother's legs or feet are cold; or if ſhe is ſenſible of being rather chilly or not comfortably warm; it will be better to procure warmth by wrapping her legs and feet in a flannel petticoat, or ſomething of the ſort, than by heaping an unuſual quantity of cloaths upon the bed, or by taking any thing hot or heating; as, by the latter means, more heat may be obtained than is neceſſary and proper, or than can be eaſily ſubdued. This method and caution will, upon the like occaſion, be proper to be attended to during the whole time of lying-in.

A fatigue of body, and an agitation and exhauſtion of ſpirits, always, more or leſs, attend and ſucceed labour: it is therefore very neceſſary, as well as comfortable to the mother, at this time, to lie ſtill and quiet, without being moved at all, or ſcarcely ſpoken to or any other-

wiſe

wiſe diſturbed by thoſe about her, for half an hour, or an hour, or until ſhe is perfectly ſettled and compoſed: half an hour ſeems the ſhorteſt ſpace that ſhould ever be given. After this, and when ſhe is properly adjuſted and ſettled in bed, ſhe may, as ſoon as it is agreeable to her, have a little gruel, without wine, nutmeg, or ſpices of any kind, either boiled along with it, or added afterwards. The gruels which are moſt in uſe upon this occaſion, are thoſe made with *oatmeal*, *groats*, and *barley*; any of which are very proper; but *barley*, where it is liked, is to be prefered, as it is more cooling and opening than the others. *Scotch barley*, as it is called, is better than pearl or french barley, to which it is a degree coarſer: when it is well boiled in water, with the addition of a very few currants put in towards the end of the boiling, and made agreeable to the taſte with a little ſugar or ſalt, it makes a palatable, wholeſome, and ſuitable food.

Spices, *brandy*, or *ſpirits*, and *wine*, of any ſort or kind, ſhould all in general be rejected, and ought to have no place at all in any part of the food or drink: none of them are eſſentially requiſite, and any of them may do a great deal of harm, at this juncture: if any thing of the kind can be excepted in this general prohibition,

hibition, a ſmall quantity of *wine* may, with thoſe who have been *daily* accuſtomed to uſe a little; but they ought to be careful, whether they chooſe to take it ſeparately, with water, or mixed in the gruel, to go *under*, rather than *exceed*, their uſual quantity, at this time, and for the firſt three or four days: but if they can do entirely without it, the better; and thoſe eſpecially who are ſeldom, or not at all, accuſtomed to it, *may be aſſured* that they will recover their ſtrength and ſpirits, and find themſelves much better, *entirely without it*.

Caudle, as it is commonly made with ſpices and brandy, is the moſt unſuitable food that ever has or, moſt likely, ever will be deviſed for this purpoſe; but it appears conſonant and of a piece with the general warm and heating method and notion above-mentioned.

A CAUTION very proper to be attended to in taking food and drink, is, never to take them *hot*, nor more than *moderately warm*; as liquids and ſpoon-meats, when taken but moderately warm, are apt to excite and diffuſe a more than uſual degree of heat over the whole body.

A *ſlight thirſt* is very common; but it is ſeldom that any drink is required when the gruel, prepared as here named, is taken; as it anſwers the purpoſes of both food and drink; and ſeldom fails of moderating and quenching a thirſt.

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The next circumſtance that claims our immediate attention, is, the degree of *warmth* proper for the mother to be kept in at this time. When ſhe is ſettled in bed, and has ſomething warm given her, ſhe very commonly has a glow of heat, frequently accompanied with ſweating; and if the warm food or drink is repeated, the curtains cloſe drawn, and the room cloſe ſhut up with a fire in it, with an additional quantity of bed-cloaths, as is often the caſe, the heat and ſweating will be increaſed, and will moſt likely continue as long as theſe means are purſued: but this heat and ſweating ought by all means to be guarded againſt and prevented, as the ſweating, ſo commonly looked for and encouraged, is not in the leaſt neceſſary, in any degree, either at this, or any other period of lying-in: but if a gentle ſweat ſhould break out at this particular time, as it very commonly does, it muſt not be haſtily ſtopped, nor ought it to be encouraged, but ſuffered to go off gradually, which it commonly will do in the courſe of an hour or two.

The means to be taken for regulating and governing this degree of heat, depends altogether upon the quality of the food and drink, the warmth of the room, and the quantity of the bed-cloaths; therefore, as particular rules cannot be exactly laid down and adapted

adapted to all ſituations, ſeaſons, conſtitutions, and circumſtances, it will be very ſufficient to obſerve in general terms; that the mother, from the time of her delivery, ought to keep herſelf as near as ſhe poſſibly can of ſuch a warmth as, and no warmer than, ſhe has been accuſtomed to at any other time when in bed, and as is now moſt comfortable and agreeable to herſelf; and always to avoid ſo much heat (even if it ſhould happen to be deſirable to her) as may aſſiſt in bringing on, or keeping up, exceſſive or long continued ſweatings. For this purpoſe, it will be proper, carefully to obſerve, that ſhe never takes her gruel, nor other ſpoon-meat, nor drink, warmer than ſhe is capable of drinking off with eaſe: that ſhe has no more cloaths upon the bed than ſhe is uſually accuſtomed to at that ſeaſon of the year: that her room be temperate, and not warmer than ſhe has been accuſtomed to, or than is quite agreeable to herſelf; and that any cauſe, that may over-heat the room, be removed; if it ſhould happen from a fire, that may be leſſened, or taken away, even if in the depth of winter; and in warm weather and in the ſummer ſeaſon a fire is always much better entirely omitted. It will often be found needful to undraw the curtains and ſet open the door, and even a window, for air, in the day time; all which may be done with

with ſafety, and to great advantage, if the room cannot be made comfortably cool without, and provided that care is taken that a draught or current of air is not ſuffered to come directly upon the head of the bed.

She ought to be kept *ſtill* and *quiet*, and from company and viſitors, and avoid much talking which often proves very fatiguing, notwithſtanding there may be a deſire and ſeeming ſtrength and ability for it; when, perhaps a little ſleep may be caught, which will be found very refreſhing.

Nothing more properly and effectually allays overheat and proves more refreſhing, at this time, than *ſitting up in bed*; and which, when the ſtrength and ſpirits will allow of it, may very properly be done once, at leaſt, in the courſe of the firſt day, eſpecially if ſhe finds herſelf inclined to be more than commonly and comfortably warm; and if ſhe even does not ſeem likely to be of more than an uſual heat, ſitting up in bed will be a great means of avoiding the riſque of it.

A fatigue of body, and agitation and exhauſtion of ſpirits, conſtantly, as has been obſerved, ſucceed labour; and therefore a ſtate of the moſt perfect reſt and quiet becomes eſſentially neceſſary, for a certain time; there would be no im-

propriety in extending this time to, or even in its exceeding, the firſt day, if overheat, and the riſque of overheat, could be avoided in ſo doing; but which they ſeldom can be. The body and ſpirits will recover from the fatigue they have undergone, and will be reſtored much ſooner by keeping moderately cool, or temperate, than by warmth or unuſual heat: heat, ſo far from being a means of affording ſtrength and ſpirits, prevents them; and not only ſo, but it adds to the weakneſs of the body and depreſſion of ſpirits, as is clearly and certainly diſcovered by thoſe in this ſituation, who, when they are, from the heat of the bed and room, more than ordinarily, and for a continued length of time, heated, or more than agreeably warm, will conſtantly diſcover more or leſs of a wearineſs, a ſenſe of weakneſs, oppreſſion and want of ſtrength and exertion, and a lowneſs and ſinking of ſpirits; all which continue and increaſe in proportion as the heat is promoted; and which will be as certainly relieved, or totally removed, by reſtoring and reducing the body to a more natural and comfortable ſtate and degree of warmth; and which, *ſitting up in bed*, as a means, in conjunction with others here pointed out, is deſirable and eligible, and well ſuited to promote that intention.

THERE is no occaſion for ſitting long at a time; however, ſhe may do it as long as, but no longer than, ſhe ſeems at eaſe, and is comfortable; and the moment ſhe perceives herſelf fatigued, ſhe may and ought to lie down. A bed-chair, when it can conveniently be had, will be found very commodious at this time; as it will not only ſupport the body better, but will alſo be more ſuitable and proper than pillows, or any thing of the like kind that will heat the body.

THE time when ſhe is to ſit up in bed, muſt vary according to circumſtances; if nothing particular and uncommon happens, and if her fatigue of body and ſpirits have not been much more than uſually great, ſhe very likely will be able to effect it, with eaſe, in about ſix hours after her delivery. If a ſweating ſhould interfere, there will, generally, be opportunity, in the courſe of that time, to check it ſufficiently to make ſitting up in bed ſafe.

THE chief obſtacle and hinderance that will, in general, prevent early ſitting up in bed is, a pain, aching, or weakneſs in the back or hips, which ſome have after delivery: however, even in this caſe, attempts ought to be made to accompliſh ſo deſirable a purpoſe; when, if the ſitting up, or being partially ſupported, in bed, cannot be borne with tolerable eaſe, it muſt be

declined for the preſent, but reſumed and again attempted as ſoon as there appears to be a proſpect of its being done with eaſe. *After-pains* may be ſo violent as to deter many from attempting ſitting up; yet ought to be no obſtacle to making the attempt ſometime in the courſe of the firſt day; and which may be done and repeated, or declined, according as it ſeems to agree.

A *faintiſhneſs*, which may happen from various cauſes, may ſeem to forbid ſitting up; yet it will often prove the beſt means for taking off the faintiſhneſs, eſpecially when it is occaſioned, as it often is, in hot weather particularly, by overheat, or when it happens from any other cauſe than a flooding.

Respecting ſitting up in bed, it may generally be obſerved, that there are many degrees of it: when an erect or upright poſition, or nearly ſo, can be borne, with eaſe, it is to be preferred; when it cannot, it muſt be ſloping and reclining, to be managed by the bed-chair, or other convenience employed for the purpoſe, and directed by the patient's own deſire and ability to comply with it. If no degree of ſitting up in bed can be borne, ſhe may be raiſed as much with her head and ſhoulders as can be done conveniently with pillows; which, and keeping her hands and arms

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out of bed, will ſerve to allay or prevent overheat, and will in general be found a comfortable and agreeable poſition and ſituation. Lying high with the head, and keeping the hands and arms out of bed, are adviſable at all times, and are attended with other advantages beſide thoſe of allaying and preventing heat.

Although it will be prudent and adviſable to keep the bed and room more cloſe in the night than in the day-time; yet, even then, a fire, or a weight of cloaths upon the bed, ought to be regulated ſo as to keep the mother of ſuch a warmth as is moſt agreeable and comfortable to herſelf, and no warmer. On this account, it will be much better for her to ſleep alone, for the firſt three or four nights eſpecially; as nothing will be more likely to overheat her than the nurſe, or any other perſon being in bed with her.

The ſize and ſituation of the room are objects worth attending to. The larger and loftier the room, in all ſeaſons, the better; and if, in hot weather, the ſun does not come much upon it, the more deſirable. However, the ſeaſon muſt be uncommonly hot if a large room cannot be kept tolerably cool, by keeping open the door, and one or more of the windows in the day, even though the ſun ſhould come full upon it. The

advantage of a large and lofty room is, that it can be kept more regularly temperate than a ſmall one, and conſequently will be much more comfortable, ſalubrious, and agreeable; and, when there is a choice, ought invariably to be preferred.

They who are accuſtomed to ſleep upon a *mattreſs*, will find it particularly comfortable at this time, either under, or over, the feather bed; but eſpecially upon the bed in warm weather; as it will be found cool, and will prevent ſweating and overheat, which are much promoted and encouraged by a ſoft bed.

It is the cuſtom with nurſes to urge, and even force upon, the mother at this time more food than is agreeable to her; which is wrong; as ſhe ought not to take it oftener, nor more at once, than is agreeable to her, and ſhe has a deſire for. Therefore her own appetite and call for it ought always to regulate the time and quantity. If more is forced upon her than her appetite requires, ſhe may become ſurfeited and tired with it too ſoon: there is ſeldom any occaſion to force it, as the appetite is commonly rather craving the firſt two or three days; and if a perſon has a natural deſire for as much food as is quite ſufficient, where can the advantage be of forcing more than is ſufficient? Spoon meats (as has

juſt

juſt been obſerved) when taken warm, diffuſe a heat over the whole body; and therefore the oftener they are taken, the more frequently that heat, which ought ſo ſtudiouſly to be avoided, is renewed and increaſed. This forcing of food is one of the errors founded upon the miſtaken notion of the extraordinary neceſſity of warmth and nouriſhing things at this time.

AFTER-PAINS, when they happen, are commonly felt very ſoon after delivery, and often increaſe and become troubleſome during the firſt twelve hours. They are by many diſregarded, from an opinion that they are ſafe, and even advantageous: however, the advantage is by no means to be diſcovered: but when they are ſevere, and return very frequently, they become heating, prevent reſt, and are very painful and teazing; and it becomes very proper to put a ſtop to, and remove them; which can be readily done by a medicine, univerſally known to be applicable to this purpoſe by every perſon in the profeſſion of medicine; but as ſome caution is needful in giving it, it cannot be mentioned here with perfect ſafety. They ſeldom return, ſo urgently, after being removed by the medicine; but which if they ſhould, it may again be repeated with the utmoſt ſafety. When the after-pains are ſo ſlight as not to prevent reſt, it is leſs needful to

give any thing for them. When they are ſevere at the beginning, they will often continue without much intermiſſion, for two or three days and nights, except ſomething is given to remove them. They are very well known to be leſs frequent of the firſt child than afterwards.

As ſtrong, hot, and heating things are had recourſe to upon all particular occaſions in lying-in, ſo they are ſeldom forgot upon this occaſion: however, they ſeldom anſwer the purpoſe of ſtilling after-pains; and, as they are injurious on other accounts, they ought to be cautiouſly and ſparingly uſed. Heat will oftener increaſe the pains than mitigate them: and if the mother is more than uſually warm, and the pains frequent and ſevere, ſhe will moſt likely find them leſſened by making herſelf cooler.

We have hitherto been conſidering the *firſt day's* treatment, only; from which however may be gathered and diſcovered the baſis and groundwork upon which every future day's proceeding is to be founded.—On the *ſecond day*, the ſame regulation of the food, warmth of the bed and room, &c. muſt be as ſtrictly enjoined as on the preceding day: and ſweating, and any degree of warmth, more than is perfectly comfortable and agreeable, ought to be avoided; as alſo every means which may have a tendency to promote or increaſe them.

It will be proper to have the mother got up on the *ſecond* day; which will give an opportunity to have the bed made, and ſhe will find herſelf more comfortable, and much refreſhed, by it. She may be permitted, if ſhe is not faintiſh, nor ſeems tired or fatigued, to ſit up a quarter of an hour, or rather more; and if ſhe is a little ſick, or giddy or light-headed, upon firſt getting out of bed, ſhe may have a glaſs of wine, or a little hartſhorn and water, as is moſt agreeable to her.

When ſhe is in bed again, ſhe will, moſt likely, feel more than uſually warm, occaſioned by the exertion and hurry of getting out of, and into, bed; therefore ſhe had better defer taking her gruel, or other food or drink that may heat her, till ſhe be ſettled and compoſed, which ſhe will find herſelf to be much ſooner without, than with taking any thing; although it is very much the cuſtom to give food immediately upon getting into bed, and which is done under the ſame general deluſive notion of keeping out cold. However, if it ſhould, as it may, happen, that upon getting into bed ſhe feels a ſlight chill or cold; if her legs and feet are rubbed with a warm hand, and wrapped in a flannel petticoat, or ſomething of the ſort, it will be a more eligible means of procuring warmth than by taking

taking any thing hot or heating, or heaping cloaths upon the bed. If the chillineſs happens to be more than very ſlight, ſhe may then take a little gruel moderately warm, without wine, &c. but needs not otherwiſe.

It is alſo very uſual, upon this occaſion of getting up the firſt or ſecond time, to have the room made uncommonly cloſe, and the mother almoſt ſmothered with the quantity of bed and other cloaths in which ſhe is folded; which, together with the buſtle and duſt that neceſſarily attends making a bed, very often overcome her, and make her very hot, languid, and faint; and are by far the moſt common cauſes of faintneſs and ſickneſs upon this occaſion, and will always increaſe them. Therefore, if, during her ſitting up, ſhe ſeems overcome with heat, ſhe muſt be made more comfortable to herſelf, in that reſpect, by ſuffering the door to ſtand open for a certain time; removing ſome part of the cloaths, if needful; and ſcreening her from the fire, &c. &c. all which may, with caution and prudence, be done without any riſque of giving her cold, and will prove very comfortable and refreſhing.

No certain length of time can be fixed upon for ſitting up, upon this, or any other day; but if the following rule is obſerved, it will direct it more certainly and properly than any other.

She

She may always, even from the firſt day, ſit up as long as ſhe finds herſelf eaſy and comfortable; but the moment ſhe perceives herſelf the leaſt tired or fatigued, ſhe muſt go to bed immediately; for if ſhe attempts to ſit up longer, her wearineſs and fatigue will be increaſed, and will not even go off readily upon getting into bed; and it is very common for the night's reſt to be greatly interrupted, and ſometimes even entirely prevented, by ſitting up much after the wearineſs and fatigue are come on.

Company, and viſitors, may ſometimes keep her up longer than is agreeable to herſelf; yet, if the extreme of ceremony is ever to be diſpenſed with, this ſituation, as entitled to every indulgence, may juſtly claim an exemption from it; and a hint of retirement may ſurely be given by herſelf, the nurſe, or any other perſon, without being deemed an infringement upon the rules of politeneſs or good manners?

Some, recommend getting out of bed the firſt day, or the day of delivery; but which does not ſeem to promiſe any advantage; on the contrary, it will moſtly be attended with too much fatigue at a juncture when reſt and quiet are ſo evidently neceſſary: it is ordered with a deſign of preventing overheat and fever; but which may be done very effectually, by an attention to the rules and directions

directions already given; *and particularly by ſitting up in bed.*—Getting up and out of bed is commonly, and very properly, deferred until the evening; as it diſpoſes and prepares her for ſleep; and that, at a time when it is moſt to be deſired.

Sitting up in bed once, twice, or oftener, in the courſe of this day, and previous to the getting out of bed, will be attended with the beſt and moſt deſirable effects: it will be a means of preventing or removing any heavineſs or pain in the head; languor; faintiſhneſs; lowneſs of ſpirits; &c. ſo common with many who are confined, for a longer time than uſual, to the bed: it is alſo admirably calculated for preventing or removing profuſe ſweatings, heat, fever, and feveriſh ſymptoms; which, as has been obſerved, are ſo frequent, and are ſo much to be apprehended and guarded againſt, at this time: it even, at this juncture, has the advantage of getting out of bed, as it anſwers moſt of the good purpoſes of the latter, without the fatigue. Independent of the eſſential benefits that are derived from ſitting up in bed, it proves an agreeable relief and variety; as alſo a pleaſing amuſement and ſeaſonable refreſhment.

The ſame caution will be needful on this, as on the preceding day, and indeed ever after: namely,

namely, ſhe ought not to ſit longer at a time, nor oftener, than ſhe can do it with tolerable eaſe and pleaſure to herſelf, and without fatigue: for if ſhe does it ſo as to fatigue or tire herſelf much, it will become prejudicial, rather than of benefit: therefore the number and length of times of ſitting muſt always be regulated by her ability for performing them; remembering, that it will be always right to ſit up as often, and long, as ſhe can do it with eaſe and pleaſure to herſelf, and no longer.

It muſt be obſerved that, during the ſitting up in bed, the room muſt, as at other times, be made comfortably cool; otherwiſe, little or no benefit will be obtained by it; and this muſt be done, by ſetting open a window, the door, or opening the curtains; one, or all of which may be done, as the ſeaſon of the year, and other circumſtances, make it needful.

The room ought not to be waſhed, even in part, during her entire confinement to it; but which is ſometimes unthinkingly done; as nothing is more likely to give cold; and there ſcarcely can ever be a real neceſſity for it, as a cloſe confinement to the room need ſeldom exceed a week.

The *third day's* proceedings are to be regulated by thoſe of the two former days. She will, on this

this day, moſt likely, be able to ſit up a while longer than ſhe did the preceding day; and, if nothing particular prevents it, will perhaps ſit an hour, or longer, with eaſe and pleaſure; not forgetting the caution of getting into bed as ſoon as ſhe finds herſelf in the leaſt tired or fatigued, whenever that happens. If ſhe has an inclination, and finds her ſtrength equal to it, ſhe may take a turn acroſs the room; but if ſhe thinks her ſtrength is not ſufficient, and that ſhe is likely to be fatigued by it, it will be better to defer it a day, or two, longer. It is needleſs to enlarge upon the propriety of ſitting up in bed, on this, as on the preceding days.

Towards the end of this, or ſometime in the courſe of the *fourth day*, an uneaſineſs will be felt in the breaſts, which diſcovers the approach of the milk. At this time ſhe will find herſelf inclined to be rather more hot and feveriſh than before, and will very likely have more of a thirſt, perhaps a faintiſhneſs, and pain in the head, with a ſtiffneſs and ſhooting pains in the breaſts; all which happen ſeparately, or unitedly, and in a greater or leſs degree, at all times; and are occaſioned by a degree of inflammation in the breaſts, naturally happening upon the approach of the milk.

These uneaſy and painful ſenſations may be much relieved and abated, by a proper attention

to

to the diet, and the temperature of the room and bed: if ſhe has hitherto taken a little wine in her gruel, or otherways, ſhe ought to abſtain from it entirely at this time, and be kept cool in every reſpect, by the admiſſion of air into the room, and every other means which can be ſafely made uſe of. No opinion can be more erroneous than that of warmth, and warm things, at this time; which is like adding fuel to the fire; as they increaſe every one of the above-named ſymptoms of fever, pain in the head and breaſts, &c. and are the ſole cauſe of, what is called, a milk fever, and the moſt common cauſe of gathered breaſts.

VERY great attention ought to be paid to the ſtate and ſituation of the breaſts at this time; for by neglect, or which is as bad, or worſe, miſmanagement, the moſt troubleſome and alarming conſequences happen, as, milk fevers, inflammations and painful and tedious gatherings of the breaſts; all which, I am fully ſatisfied, might be totally avoided by due care.

THE means to be taken for preventing theſe miſchiefs, are ſimple, and ſuch as may be very eaſily complied with by every one: they are as follow. The diet and cool treatment, as above-named, muſt be ſtrictly enjoined. As ſoon as the breaſts, by their appearance, may be ſup-

poſed

poſed to contain milk, they muſt be drawn by the child, or a grown perſon; and that, two, or three times a day, at leaſt; by which means they will be kept cool, and eaſy.

It often happens that the child will take one of the breaſts more freely than the other; by which, the drawing of one breaſt is frequently neglected, until it becomes much ſwelled, hard, and painful; oftentimes with lumps, or a lump in one particular part, which is ſore and painful to the touch. Whenever this happens, it becomes of great importance to have that breaſt well drawn, twice a day at leaſt; and that daily without intermiſſion, while the leaſt ſoreneſs, ſwelling, or hardneſs remain. The drawing of the breaſt is, at this time, commonly attended with ſome pain, eſpecially the firſt and ſecond drawings, which prevents and diſcourages many from ſuffering it to be repeated ſo often and ſo completely as it ought to be; by which neglect, the breaſt gathers: but they who are aware of, or have experienced the pain and trouble of a gathered breaſt, would, I dare ſay, have very little doubt or heſitation in ſubmitting to any, the greateſt, pain which can attend the drawing, rather than riſque a gathering; as, drawing is the chief dependence; and, without it, little benefit or relief is to be had.

GREAT confidence and dependences are ſometimes had in outward applications, in the form of ointments, and other different matters; and nurſes, who are moſtly, only, conſulted upon this occaſion, are ſeldom without ſomething of the kind, upon which they firmly and entirely depend, for removing the complaint: but a dependence upon outward applications only, whatever their efficacy may be, is extremely uncertain, and not to be truſted to, with confidence: however, although we cannot reſt all our dependence upon them, they may yet be employed to ſome advantage.

OILS, or greaſy applications, ſeldom do any good, except, that when the breaſt is much ſwelled, they help the ſkin to ſtretch, which will often give preſent relief. Of all the things of this kind, the oil, or fat of geeſe, commonly called *gooſe greaſe*, ſeems to have very much the preference, as it is very gentle and ſmooth, and more penetrating than any other oily or greaſy application; and, when it is nicely and properly prepared, its ſmell is not diſagreeable.

RUM, and *vinegar*, ſeparately, or mixed, are common applications; and although much dependence cannot be placed on them, yet they are likely to be of ſome ſervice. It may be obſerved, that the relief which is ſuppoſed to be

found from theſe, and other ſuch like applications, depends full as much upon the rubbing with the hand, as any efficacy in the ointments and other applications that are uſed; and as much relief will frequently be found from the dry hand alone, as when any thing elſe is made uſe of.

POULTICES, as they are commonly made with bread and milk, with the addition of oil, or any thing elſe that is greaſy, are better omitted; as they will forward rather than diſperſe or put back a gathering: but a poultice made as follows is, perhaps, ſuperior to any other, or perhaps any other outward application yet invented for diſperſing a gathering.

TAKE of, *extract of lead*, and *brandy*, each three large teaſpoonful; put them to a quart bottle of *rain*, or *ſpring water*; and with this, and the *crum*, or inſide, of a fine, ſtale *wheaten loaf*, make a *poultice* in the uſual way, without the addition of milk, oil, or any thing elſe: lay it on, not warmer than the heat of the body; and change it night and morning: it is not apt to become uneaſy, or ſtiff, when made moiſt enough. Care muſt be taken that neither the child, or any other perſon, draws the breaſt, without firſt waſhing the nipple well with milk and water, if it ſhould happen to be wet with the poultice.

It will be adviſable to avoid drinking much of any liquid, although the thirſt may ſeem to require it; and the diet, for the preſent, and while the pain and ſwelling in the breaſt continue, or increaſe, may be chiefly confined to chocolate, and light puddings of any ſort that are moſt agreeable.

If there be the leaſt diſpoſition to coſtiveneſs, a ſtool or two muſt, without delay, be procured by means of *a glyſter*, *lenitive electary*, *infuſion of ſenna*, *caſtor oil*, or any thing elſe equally as mild and ſafe. If the pain and ſwelling ſeem to gain ground, rather than abate, it will be proper to procure a looſe ſtool, or two, and that, daily while they continue, although there be not a coſtiveneſs.

In this ſituation of the breaſts; that is, when they are painful, ſtiff, and ſwelled; they feel the moſt uneaſy when they are not ſupported; as their own weight cauſes an additional pain; hence it happens, that they whoſe breaſts are ſo circumſtanced, have an inclination to lay ſtill in bed, and a diſlike to getting up, or motion; proceeding from the eaſy poſition, that is found for the breaſts, in lying; and the uneaſineſs from motion or ſitting up, from their own weight. This deſire, in themſelves, to lay in bed, aided by an additional warmth that is uſually ſupplied

by the increaſed warmth and cloſeneſs of bed and room, becomes a principal cauſe of augmented pain and the many miſchiefs that follow and happen to the breaſts in lying-in. Keeping the bed and room, therefore, full as cool at this as at any other time, is indiſputably neceſſary, and ought not to be neglected: and although lying in bed may, for the reaſon above-named, ſeem to be the moſt eaſy and deſirable poſition; yet, as it keeps the body much warmer (notwithſtanding any care that may be taken to keep the room cool) than it will be up and out of bed; getting up, once a day, ought to be complied with, if poſſible: there will be no danger of getting cold by it; on the contrary, it will allay the heat and feveriſhneſs, ſo conſtant attendants at this time, and will be found very refreſhing.

To alleviate the uneaſineſs which may be occaſioned by the weight and hanging poſition of the breaſts, they ought to be ſuſpended in a linen cloth tied over the ſhoulders; by the hand; or in any other manner that may ſeem moſt eaſy and practicable; by which means, the mother will not be debarred the advantage, and gratification as it will be found, of her daily and regularly getting up. If, however, it ſhould happen that the fatigue of getting out of bed cannot be borne, but which will ſeldom or never be the caſe without

out great neglect at the firſt, ſitting up in bed, now and then, in the day, with the breaſts ſupported as before-mentioned, may be complied with, and ought not to be neglected; as it will anſwer, in part, the intention of ſitting up out of bed.—The length of time of ſitting up in, and out of, bed, muſt now, as at other times, be regulated by her ability for doing it: ſhe ought not to ſit ſo long as to tire and fatigue herſelf, as a very good purpoſe will be anſwered by doing it for a ſhort time.

When it ſo happens, from neglect or any other cauſe, that matter is formed, and a gathering has taken place and is advancing; it is not of ſuch immediate conſequence to attend ſo ſtrictly to the rules of ſitting and getting up; eſpecially if they are attended with particular uneaſineſs, or pain; and the eaſieſt poſition, in that caſe, may be indulged in: but if they can be done without ſenſible uneaſineſs, it will be adviſable to comply with them accordingly.

From what has been obſerved, it may be remarked; that the breaſts of the mother who propoſes giving ſuck, ought always to be kept well drawn by her own child, or another child, a grown-up perſon, or a glaſs, ſo as to keep them ſoft and gentle, and free from lumps and hardneſs; and this to be done daily, and regularly from the firſt

ſign and appearance of milk, although it ſhould give ſome pain; otherwiſe, a gathered breaſt is moſt likely to be the conſequence.

If, from neglect of drawing, or any other cauſe, the pain and hardneſs ſhould continue, or increaſe, take ſomething that will procure a ſtool or two; keep cool, and take the food cool and without wine, ſpices, or any thing heating; let the breaſts, or breaſt, be now and then gently rubbed with the dry hand, or with rum, brandy, vinegar, or gooſe greaſe; let the pained part of the breaſt be covered with a ſmall piece of thin flannel, which may be moiſtened with a little hartſhorn, if the ſmell of it can be borne: if, notwithſtanding theſe means, the pain and ſwelling continue, the poultice may be applied.

By a perſeverance in ſome, or all, of theſe means for a few days, the breaſt (for it very rarely happens that both breaſts are threatened with a gathering at one and the ſame time) ſoftens, and the pain, ſwelling, and hardneſs, together with the fever and feveriſh ſymptoms, will gradually decline, if taken early enough, and to which I have met with very few exceptions.

I have no doubt in declaring, that, when proper care is taken from the beginning, a gathering may generally be prevented; and that the greateſt number of thoſe which do happen, are from neglect, or miſmanagement.

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When the breaſt has been neglected or miſtreated for ſome time, ſo that the gathering is begun, and the matter formed, it will very ſeldom be poſſible to diſperſe and put it back: however, all the means here recommended (the drawing, perhaps, only excepted, which will now be uncommonly painful) may be uſed; and if they do not entirely remove, may perhaps leſſen, the evil.

If a chill or ſhivering ſhould come on, it is almoſt a ſure ſign of the gathering and formation of matter. The time when the matter may be expected to form, cannot be exactly aſcertained; it often is within a week from the time the pain and ſwelling begin. When the gathering breaks, it is not uncommon for the milk to diſcharge along with, and out of the ſame place with the matter; eſpecially when it breaks near the nipple; but which is attended with no other inconvenience than ſometimes keeping the place open and unhealed rather longer than it otherwiſe would be.

It ſeems needleſs to purſue this ſubject farther, as the ſurgeon's aſſiſtance is commonly ſolicited when the gathering has taken place; only, it may not be unpleaſing to thoſe who have an uncommon dread of ſurgeons inſtruments, to obſerve, that there very ſeldom is occaſion to make uſe of them, and that the breaſt breaks, and heals, commonly, *without their uſe at all.*

As gatherings in the breaſts are ſo painful; and as the conſtitution ſuffers much from them by long confinement and its conſequences; it becomes a matter of great importance to guard againſt accidents ſo diſtreſſing, by every practicable means; eſpecially with thoſe who are frequently ſubject to them when they lie-in; and many are ſo circumſtanced.

The inhabitants of towns, and thoſe in better life, appear to have them more frequently than the laborious, particularly of the country; from which, it may be concluded, that the diet, and want of ſuitable exerciſe, are the chief cauſes before delivery, aided by miſtaken care and indulgences in lying-in. It appears therefore of how much importance it is, on this, as upon many other accounts, to pay a due regard to theſe matters, agreeable to the rules and cautions which have now been offered after delivery, as alſo thoſe during pregnancy, page 278 and 282 on the diet and exerciſe; where, reſpecting the diet, it is there obſerved to be as advantageous and neceſſary upon this occaſion, as it is in the preparation for the ſmall-pox.*

The

* *To the Medical Reader.*——The free uſe of animal food, with ſeaſonings and rich ſauces, and the quantity, although but ſmall, of wine, &c. the prevailing uſage of towns, joined

The nipples, which, before delivery, were bathed with rum or brandy (ſee page 295), may have the ſame continued, between the times of the child's ſucking, for a week, or longer, to harden them, and to prevent their being ſore with the child's ſucking. Some will have ſore nipples, notwithſtanding every precaution; and others eſcape it, without doing any thing to them. When the nipples are ſore, they may ſtill be waſhed in the ſame manner; or, if that does not ſeem to agree with them, a greaſed rag, or a piece of the net or caul of veal, may, if they feel eaſy to the nipples, be kept on between the times of the child's ſucking. They are ſometimes tedious and ſlow in healing, whatever is

joined to a want of proper exerciſe, communicate to the ſyſtem a diſpoſition to inflammatory affections; which, from the irritation regularly produced by the increaſed action of the veſſels of the breaſts by a more than uſual determination to thoſe parts at this time, may be expected to excite a degree of inflammation in them that will frequently terminate in ſuppuration, with thoſe ſo circumſtanced; and which the puerperal ſtate will very much contribute to, without particular attention in the direction of it. On the other hand, the laborious, of the country eſpecially, by avoiding the prediſpoſing cauſes of inflammation by the ſimplicity and regularity of their diet; breathing a pure, uncontaminated air; and the regular uſe of free exerciſe; more generally eſcape theſe and all other local inflammatory affections from internal cauſes alone.

done

done to them. Whatever may be applied to the nipples that may be ſuppoſed offenſive to the child, ought to be wiped off before he ſucks. I have known a little lead water, incautiouſly applied to the nipples, do the child harm, although it would otherwiſe have been very ſuitable for ſkinning the nipples.—A rag moiſtened with warm milk and water, and repeatedly applied to, and kept upon, the nipples, will, when they are very ſore, often afford relief and give eaſe when other means fail.—*Pap-ſhells*, kept upon the nipples between the times of the child's ſucking, have been found advantageous: they defend the nipples from the preſſure of the ſtays, &c. gently draw them out, and prevent the linen or any thing elſe ſticking to them.

As ſoon as there is any ſign or appearance of milk in the breaſts, which there generally is about this time [the latter part of the third, or the beginning of the fourth day], ſometimes ſooner, the child may be laid to the breaſt, if the mother intends to give ſuck; the putting the child to the breaſt earlier, can anſwer no good purpoſe (page 56 and 83), but moſt likely the reverſe; as many children, when they get nothing the firſt or ſecond time of ſucking, cannot, oftentimes, without great difficulty, be brought to take the breaſt again. The longing and notion that it gives

gives them of the breaſt, without ſatisfying them, often makes them croſs and uneaſy: and when they ſuck without getting milk, they are very liable to get wind upon their ſtomachs, which makes them unwell, and, of courſe, fretful.

It does not appear that putting the child to the breaſt upon the firſt or ſecond day, or that drawing the breaſts, are means calculated for bringing the milk any ſooner than it is otherwiſe diſpoſed to come without.

There is oftentimes a good deal of difficulty in getting a child to take the breaſt, the cauſes of which have been enumerated page 117 (ſee alſo page 296). Very few children take one of the breaſts ſo well as the other; and ſome quite refuſe it: however, that breaſt ought not to be given up, but ſhould be regularly drawn twice or three times a day; and the child, although at preſent he refuſes it, may be brought to take it in a little time. Many diſadvantages may attend giving ſuck with one breaſt only; it leſſens the quantity of the milk; and the mother and child (ſee page 126) from being confined ſo much to one poſition, may, one, or both, get a caſt, and become crooked. It is not unuſual with thoſe mothers who have repeatedly given ſuck with only one breaſt, to have one ſhoulder raiſed, or fuller than the other.

On

On the *fourth day*, therefore, the mother muſt not expect to be quite ſo well as ſhe has been the preceding days, nor have ſo good an appetite; as her milk, although it comes ever ſo favourably, may be expected to give her a little uneaſineſs: however, by obſerving the rules and cautions above recited, ſhe will, without much doubt, get over this difficulty, as it will be greatly leſſened, or entirely overcome. She may obſerve the ſame rules about ſitting up, &c. as the day before; and although ſhe ſeems very well, and comfortable to herſelf, ſhe had better avoid wine or any thing of the like kind.

If ſhe has been accuſtomed to take *butter-milk* at any time of her pregnancy, and found it agree with her, ſhe may ſafely indulge in a little now: (*whey* perhaps may not be ſo ſuitable, as it might endanger a looſeneſs): and if it be thinned and warmed with a little warm water that has boiled, it will be a pleaſant and grateful drink; and if it ſits light and eaſy upon the ſtomach, and does not occaſion griping or looſeneſs, will be very ſafe, proper, and uſeful; as it will prevent, or cool or allay, any heat or feveriſhneſs; and will promote the ſuck. It may be taken in moderate quantities every day, from this time, during lying-in, or while it agrees, as here mentioned, and above, page 280. If it ſhould *not* have been taken

taken before, and during pregnancy, there can be no impropriety in a cautious trial of it *now*.

On the *fifth* day, her breaſts will, if ſhe has had them drawn, and has obſerved the other directions, be more ſoft and eaſy, and ſhe will feel cool and comfortable to herſelf. If her breaſts are quite eaſy and ſoft, ſhe may, if ſhe chooſes, have a little boiled chicken, or veal, or the broth of either, for dinner; with a glaſs of wine and water, or malt liquor, as is moſt agreeable: but if there be any thirſt, heat or feveriſhneſs, or uneaſineſs in the breaſts, the meat and liquors are better entirely omitted this day.

On the *ſixth* day the ſame rules may be obſerved as on the *fifth*; and on the SEVENTH her breaſts will moſt likely be ſo ſettled, and ſhe will find herſelf ſo ſtrong and well, that ſhe may eat a little boiled meat for dinner, and drink a glaſs of what ſhe likes beſt after it. She will alſo very probably find herſelf able to ſit up a great part of the day; and alſo to walk into another room, upon the ſame floor, either on this or the day following; which ſhe may do to advantage, if the room is properly aired; and ſhe will find herſelf much refreſhed by it.

The advantages which attend this early going out of the room are very great: the exerciſe and freſh

freſh air give ſtrength and ſpirits, and promote a flow of milk: it likewiſe gives an opportunity for the chamber to be properly cleaned, and alſo aired, by ſetting open the doors and windows; ſo that upon again coming into it, ſhe conſiders it as an agreeable and pleaſant retreat, rather than as a place of confinement. She had better, upon her firſt going out of her room, not attempt ſtaying longer than is needful for ſettling and adjuſting her room; but ſhe may, hereafter, prolong her ſtay, by degrees; ſo that at the end of the fortnight, ſhe may ſafely venture down ſtairs to dinner.

Her health, ſtrength, ſpirits, and appetite, increaſe daily. Towards the end of the third week ſhe is as well, and looks as well, nearly, as when in her beſt health at other times.—And, at the month end, ſhe recovers her wonted glow of health, and ſpirits; and her conſtitution is as perfect and unimpaired as if nothing had happened to her.

This favourable termination of lying-in is far from being unuſual; and the account will not be found exaggerated, when the rules, here recommended, during its progreſs, are duly obſerved; and is what, in general, may be very eaſily obtained, frequently even more completely and ſpeedily than here deſcribed.

That the advantages of this mode of cool treatment may appear more conſpicuous and

ſtriking,

ſtriking, let us contraſt it with the method formerly, and ſtill by ſome, practiſed altogether, or in part.

We will ſuppoſe a woman, of health and temperance ſuited to a female character and conſtitution, ſafely delivered: ſhe immediately has ſomething very cordial given her; is put to bed, cloſely covered up with an additional quantity of bed-cloaths; the curtains are cloſe drawn; and the room ſhut up cloſe, with, perhaps, a fire. As ſoon as ſhe can take it, ſhe has caudle given, or ſome ſort of gruel with brandy or wine, and perhaps hot ſpices in it, and that, as hot, and as often repeated, as ſhe can well take it: of courſe ſhe will be very hot, and moſt likely will ſweat: this practice is continued, with little or no intermiſſion, for ſome days, oftentimes a week, or longer; during which time, ſhe is cloſely confined to the bed, in an almoſt continued ſweat; and the air is, as much as poſſible, excluded the room.

Towards the third or fourth day ſhe is ſenſible of a greater degree of heat than before; ſhe will have more thirſt; and, very likely, a pain in her head, back, and limbs, with a languor, faintneſs, and ſenſe of weakneſs; perhaps ſhe may have cold ſhiverings. In this ſituation it appears to thoſe about her, that, from the pain

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in the head, back, and limbs, and from the ſhiverings, ſhe has by ſome means taken cold; accordingly, ſhe is confined ſtill cloſer, if poſſible, in bed; and warm, cordial things are given to renew or increaſe her ſweating.—During this time, her breaſts will moſt likely be uneaſy, and, if the greateſt care is not taken of them, ſhe may have a *milk fever*, or a *gathered breaſt*; and, if the heat and ſweatings are continued, it is not unlikely that ſhe may have the *child-bed fever*; or, if ſhe eſcapes that, an eruption upon the ſkin reſembling a raſh, which denotes the preſence of what is called a *miliary fever*. It is under theſe circumſtances that danger is to be apprehended, and in which many lives have been loſt; all which are totally and entirely brought on and occaſioned by heat and heating things, and which might be completely avoided by cool treatment.

It very ſeldom happens but that, under the treatment here deſcribed, all or moſt of theſe alarming ſymptoms are either threatened, or exiſt partially or altogether: when they do not threaten danger, and happen only in the ſlighteſt degree imaginable, yet, from the long confinement, heat, and ſweating, the health and conſtitution will be impaired, and will ſuffer very much; the ſtrength and ſpirits will be conſiderably

ably reduced; and a pale, ſickly complexion, and languid countenance, will uſurp the ſeat of health and vivacity, and perhaps not readily relinquiſh it; for upon her firſt getting up, her firſt going out of her room, and particularly upon going out of doors, ſhe will be ſenſibly affected with the cold air, and very likely *really* take cold; which puts her upon having recourſe to warmth and ſweating to remove it; but which, if ſhe *has* acquired a little ſtrength, reduces her to her former ſtate of debility and weakneſs; ſo that, upon ſtirring out, ſhe is always carefully muffled up; and may acquire ſuch a habit of care and indulgence as ſhe cannot get rid of without the utmoſt difficulty, perhaps never completely. Hence it is we frequently ſee healthy, ſprightly women, after lying-in once or twice, loſe their vivacity and healthy look, and which they, ſometimes, never recover.

THERE is an evil attending the free uſe of hot and heating things, as, hot liquids, ſpices, ſpirits, and wine, that has not yet been mentioned; but which proves as powerful an objection to them as any yet named: and that is, the injury they do to the ſtomach, by deſtroying its tone and powers of digeſtion; whereby it may, hereafter, require a more conſtant repetition of ſuch like things than is conſiſtent or adviſable, or agree-

able and neceſſary to a female conſtitution, for the purpoſes of health. This will be readily conceived, when it is conſidered, that the female conſtitution is, by nature, habit, and education, delicate; and as a particular abſtemiouſneſs is, in general, ſtrictly obſerved previous to this period and occaſion, no wonder ſo ſudden and material a change (at a time too when it is highly and particularly unſuitable) ſhould be attended with ſuch bad and laſting conſequences.

They who attend to the deſcription, but particularly they who ſee or experience the difference of the two different methods of treatment here deſcribed, cannot heſitate in declaring in favour of the former, as being not only more ſalutary, but alſo more pleaſant, comfortable, and deſirable: it is perfectly conſiſtent with the dictates and deſign of nature, which the other is as foreign and repugnant to. By the former method, a lady will preſerve her health, bloom, vivacity, and youthful appearance unimpaired and unfaded during the whole time of her bearing children: whereas, by the latter mode, ſhe muſt be fortunate, or indebted to a more than common conſtitution, if ſhe is not deprived of a very great ſhare of them all, in even her *firſt* lying-in.

The method here recommended would be imperfect, and might be liable to ſome objections, did

did it not agree ſo well with all ranks and conſtitutions; for, as has been juſt now obſerved, the ſickly and delicate find it agrees with them remarkably well, and they have their health improved by it: it alſo agrees not leſs well with the ſtrong and healthy, who have their health preſerved to them by it. In ſhort, there are no conſtitutions with which it does not agree, and that, much better than the other method.

THE ſimplicity of this practice brings it within the reach, and adapts it to the ſituations, of all ranks and degrees: and it is a reflection that muſt be highly acceptable and grateful to a contemplative and feeling mind intereſted in the cauſe of humanity, that, the humble mate of the humbleſt peaſant may, in a ſituation ſo inevitable, and of ſo much importance to the comfort, proſperity, and even exiſtence of mankind, be accommodated nearly as advantageouſly as the moſt exalted *peereſs*, or even MAJESTY itſelf. "*Nature!* in the midſt of thy diſorders, thou "art ſtill friendly to the ſcantineſs thou haſt cre-"ated—with all thy great works about thee, "little haſt thou left to give, either to the ſcythe "or to the ſickle—but to that little thou granteſt "ſafety and protection; and ſweet are the dwell-"ings which ſtand ſo ſheltered." *Sterne.*

I HAVE ſelected the following caſe, as being very applicable to the preſent ſubject, and as it

will convey a juſt idea of the two oppoſite modes of treatment we have been deſcribing.

A LADY, healthy, and of good conſtitution, lay-in of her firſt child, a very few years ago, in the ſpring, attended by a gentleman of repute, in *London*. During her lying-in, ſhe was treated, in the manner very uſual there, with *caudle*; and had *wine*, and other *good things*, as they are commonly called, of the like kind given her very liberally. As ſhe propoſed nurſing her child, ſhe was directed and adviſed *by her nurſe* to continue this form of diet after lying-in, as the beſt and only proper means of ſtrengthening her, and of promoting her nurſing. Early in the ſummer ſhe came to *Liverpool*; at which time ſhe was very unwell (as ſhe had been during and ſince her lying-in); had a continued fever upon her, with heat, thirſt, and fluſhings and eruptions upon her face and body reſembling the ſcurvy; and was languid and weak. Her child was nearly in the ſame ſituation, with a raſh, and an almoſt conſtant griping and complaint in his bowels.—Being *prejudiced* in favour of a regimen or diet ſhe had been taught, by her nurſe, to look upon and conſider as ſtrictly right and proper, ſhe was not eaſily prevailed upon to relinquiſh it: however, ſhe and her child daily growing worſe, ſhe conſented to vary it:

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the child was weaned and ſent into the country, where, he ſoon became healthy and well; and ſhe herſelf, by a diet chiefly vegetable, and, of which, *butter-milk* made a principal part, recovered her health. The following ſummer, ſhe lay-in in this town; was treated in the manner above recommended; and, although it was the hotteſt weather in the ſeaſon, recovered, and had her health, remarkably well. She ſuckled her child, who, with herſelf, was alſo free from the leaſt attack of the above diſagreeable ſymptoms.

THIS caſe, which is as much to the purpoſe as a caſe can be, clearly points out and diſcovers the reſult and effects of the two different methods of treatment. In the firſt inſtance, the appearances there deſcribed happened, without any the leaſt doubt, in conſequence of the lady's particular treatment* under the direction of her nurſe, to whoſe management ſhe was (after delivery, agreeable to the prevailing cuſtom) entirely reſigned; as much as they were prevented, or rather avoided, by it in the ſecond inſtance. Her good conſtitution preſerved and

* I AM informed that ſtrenuous efforts are making in London, by many of the moſt reſpectable of the faculty, to reform the practice upon this occaſion, by the introduction of a cool treatment in lying-in.

reſcued her, in the firſt inſtance, from preſent danger, and alſo from any future laſting bad conſequences, which otherwiſe might have happened.

Child-bed, or Puerperal Fever.

THIS is called a child-bed fever, from its being peculiar and confined to that ſituation. When it happens, it generally comes on ſome time in the firſt week; commonly on the third or fourth day. It begins with a ſhivering, like the cold fit of an ague; and which, like the ague, is alſo ſucceeded by a great and burning heat of the whole body; thirſt; fluſhing in the face; pain in the head and back; and a ſickneſs at ſtomach; after ſome time a ſweat breaks out, which relieves the pains, and, if encouraged by warmth and heating things, continues for ſome days: a griping is not uncommon; yet it more frequently occurs when theſe ſymptoms have continued for ſome days, and is then generally accompanied with a looſeneſs.

When this complaint happens ſo early as the third or fourth day, it commonly makes its attack in the manner here deſcribed; but when it is much later of coming on, it ſteals on imperceptibly

perceptibly and without much ſhivering (or a *ſhake* as it is commonly expreſſed) or any extraordinary degree of burning heat; when, the firſt appearances of it are, a heat greater than uſual, a languor and faintneſs, a ſickneſs frequently with vomiting, a ſweating, and conſtant griping with a looſeneſs.

This may be diſtinguiſhed from the milk fever (mentioned immediately after this), by the ſhivering, which does not happen at the beginning of the latter; and by the breaſts, which, in this caſe, are often more than ordinarily eaſy and ſoft; whereas in the milk fever, they are always ſwelled, hard, and painful.

From the long ſtring of unfavourable ſymptoms here enumerated, this complaint will appear alarming, if not dangerous: it would be diſingenuous not to acknowledge *it is ſo:* but however alarming this declaration may appear, the alarm will be greatly abated, if not entirely removed, when it is obſerved, that this fever, with all its alarming conſequences, may be, perhaps, *always* avoided; and that, when it does happen, it is occaſioned entirely by improper management before, but chiefly at and after delivery.

Through the whole of the directions and rules, that have here been offered, from the

time of delivery, a particular caution has always been given againſt a cloſe room, heat, and heating things; and it has been obſerved (page 299) that there is a particular diſpoſition to fever and feveriſh ſymptoms at this time. This *child-bed fever*, therefore, is no other than that feveriſh diſpoſition increaſed and aggravated by heat and its conſequences; the chief of which is, foul confined air from the cloſeneſs of the bed and room; and may as certainly be avoided by a due obſervance of the rules there and afterwards laid down. The preventive means, therefore, have been fully deſcribed. But when the complaint does happen, although it will be always neceſſary to procure proper medical aſſiſtance as early as poſſible, yet, in the mean time, the following directions may be obſerved to great advantage.

When, if about the third or fourth day after delivery, a coldneſs and ſhivering ſhould come on, inſtead of overloading the bed with cloaths, and pouring into the patient all the hot and ſtrong things that can be come at (as is the common cuſtom upon this occaſion), it will be more adviſable to rub the legs and feet with a warm hand, and to wrap them up in a flannel petticoat, or ſomething of the like kind, made warm; and, if the thirſt requires it, to give her a little

a little weak wine and water, without nutmeg, moderately warm; or a little thin gruel, in the ſame manner: for, if much heat is applied, or heating things given, the hot fit, which is ſure to follow, will be proportionally aggravated and prolonged. When the hot fit comes on, the heat and ſweating muſt not be encouraged, but, on the contrary, diſcouraged, by undrawing the bed-curtains; by making the room cool, by removing the fire, and, according to the weather and ſeaſon of the year, ſetting open the door and a window; by ſitting up in bed; getting out of bed; and by taking the food and drink cool: by ſome, or all, of which means the farther progreſs of the fever will be commonly prevented, always mitigated. It is to be obſerved, that the ſweating muſt not be *ſtopped immediately*, and entirely, upon its firſt breaking out, by cold and cold things; but rather *diſcouraged gradually*, ſo that it may entirely ceaſe in the courſe of a few hours.

It is a common opinion, that, when ſhiverings come on, they muſt be occaſioned by cold; and that warmth and forced ſweating are neceſſary to expel it and carry it off. This miſtaken concluſion may, moſt likely, have all along betrayed nurſes and others into the erroneous practice of warmth and heating things, by way of avoiding

avoiding and preventing ſo formidable an evil, in this ſituation; and unfortunate it has proved to preceding ages that ſo fatal an error prevailed ſo long; as it is diſcovered, that not cold, but, its oppoſite extreme, heat, and its conſequences, are the only cauſes of it; and that the greateſt degree of heat, that could ſafely be adminiſtered, would not avert, ſuſpend, or even leſſen the ſhiverings.

As this fever may be entirely brought on by heat and cloſe confinement, with thoſe who are the leaſt diſpoſed to it; how much muſt it be increaſed and aggravated, by ſuch means, with thoſe who have, from conſtitution, a more than ordinary diſpoſition to it?—It muſt, as it has often done, prove alarming and dangerous.

It very rarely happens that any, even the ſlighteſt, appearance of this fever is diſcovered when the cool treatment above deſcribed (pages 298, 304 and following) is properly obſerved from the time of delivery; and, more eſpecially, when the diet and exerciſe during pregnancy (pages 278, and 282), are attended to. The diet in a particular manner, as there obſerved, is worthy attention; as it is as much calculated to prepare the body to reſiſt, or rather to check and ſubdue this fever, as it is ſerviceable in the preparation for the ſmall-pox, for the purpoſe

poſe of rendering that diſeaſe more mild and favourable.

ATTACKS of this fever are more frequent, from midſummer until the froſt ſets in, than at any other ſeaſon; therefore, more care is requiſite to prevent it, at thoſe ſeaſons. And as butter-milk, whey, and vegetables of all ſorts, are then in the higheſt perfection, ſuch as are found to agree may be made uſe of during pregnancy, as well as in lying-in.*

A MILK FEVER, which is by ſome ſo much dreaded, happens about the fourth or fifth day, and is occaſioned by the ſwelling and hardneſs of the breaſts, conſequent upon the firſt coming of the milk into them.

EVERY unuſual degree of heat and fever that happens at this time, and is occaſioned by the

* *To the Medical Reader.*——As the *puerperal fever* regularly diſcovers evident marks of putreſcency, it may be ſuppoſed to be, as it is, moſt prevalent at the decline of the year; that ſeaſon favouring a putreſcency of the fluids. The advantages, therefore, from a diet chiefly vegetable, when it agrees, and exerciſe, with the inhabitants of large towns eſpecially, during pregnancy, are too obvious to need farther comment; as alſo, a ſtrictly cool treatment, and every other obviating means, in lying-in.

milk,

milk, may be called a milk fever;* although it ſeldom is worth notice, nor has that name given it, except when the fever runs high and is in the extreme.

It will follow, from what is now obſerved, that the cure of the milk fever muſt entirely depend

* *To the Medical Reader.*——The heat and feveriſhneſs that is obſerved to take place upon the firſt ſecretion of milk in the breaſts, ſeems to be purely *ſymptomatic*, from the *local* affection; and not *general*, as depending upon abſorption of milk at all, or any other cauſe. If the fever was *general*, it would of courſe be regularly accompanied with *rigor*; which we do not find it is, except when, from a continued obſtruction of the milk from want of drawing, from an inflammatory diſpoſition in the breaſt or breaſts, or from a *phlogiſtic diatheſis* in the ſyſtem (ſee note to page 334), a ſuppuration takes place; and, if it was from abſorption, it is moſt likely that it would aſſume the appearance of a hectic, which is not to be obſerved at this early period, without preceding ſuppuration. As it rarely happens but that more or leſs of heat and feveriſhneſs may be diſcovered to accompany the firſt formation and ſecretion of milk, and which increaſe as the breaſts become diſtended, but which are as effectually and inſtantly relieved by drawing the breaſts; ſo, the ſtimulus given to the ſecreting veſſels by their increaſed action, and the diſtention of the lacteal tubes, as alſo that of the external teguments, appear to be the ſole (and alſo ſufficient) cauſes of the feveriſh ſymptoms: for ſo early as the ſecond or third day from the firſt ſymptom and appearance of ſecretion (which does not take place while the lochia

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pend upon the abating and leſſening the inflammation, ſwelling and hardneſs of the breaſts; and that the preventing it will alſo depend upon not ſuffering that inflammation, ſwelling and hardneſs to take place; all which means have been fully ſpoken of and explained, ſee page and following). Drawing the breaſts, keeping cool, taking nothing but what is cool and of a

is undiminiſhed) no degree of abſorption, ſufficient to produce ſo material an effect, can be ſuppoſed to happen, yet the ſymptoms of fever are, about that time, often very urgent. It is true, when partial tumors and hardneſſes are formed, whether of a cancerous, ſcrofulous, or the like kind; or when, from long retention of the milk; cold taken; or any other cauſe; rigors, and other ſymptoms of general fever; or hectic from abſorption, will take place; but which differ much from what is generally underſtood by a milk fever commonly ſo called, happening ſo early as the third, fourth, or fifth day after delivery, and the ſecond or third of its real ſecretion; in which ſhort ſpace the milk, if really abſorbed, cannot be ſuppoſed to acquire a morbid acrimony ſufficient to excite fever.

As the milk fever, ſo called, is commonly ſuppoſed to happen from an abſorption of that fluid, an inquiry into the real nature of it may have its uſe in practice; and, if the diſtinction here offered appears eligible, the title of *milk fever* will neceſſarily be exploded by the *medical faculty*, and, *ſymptomatic fever from ſecretion of milk*, or ſomething of the like import, ſubſtituted in its place; as no *partial*, *local* cauſe, without a *general* participation or affection of the ſyſtem, can properly conſtitute a *diſtinct ſpecies* of FEVER.

cooling

cooling quality, and ſitting up in bed, or getting out of bed, muſt be all complied with as circumſtances will permit, and as have been adviſed in their reſpective order.

A MILIARY FEVER is what lying-in women are known to be ſometimes liable to; and is known and diſtinguiſhed by an eruption reſembling a raſh, coming out commonly firſt upon the neck and breaſt, afterward upon the other parts of the body, and ſeldom or never upon the face: it generally appears the thickeſt upon thoſe parts that are kept the warmeſt and cloſeſt covered.

The eruption, upon its firſt coming out, is red; but towards the ſecond or third day it becomes white; and ſoon after goes off with a dry ſcurf. The complaint does not however terminate here, as it is immediately ſucceeded by another raſh or eruption, which proceeds, and goes off, in the ſame manner; and that, ſometimes, ſucceſſively and repeatedly.

The time of its firſt appearing is uncertain: it ſeldom comes before the end of the firſt week; and may happen afterward at any other period of the confinement, to the bed particularly. It is attended with a ſenſe of weakneſs, and a dejection and depreſſion of ſpirits.

This

This fever, and theſe appearances, are entirely occaſioned by much warmth, warm and heating things, and, more eſpecially, by much and long continued ſweating in bed, as there is every reaſon to ſuppoſe it never happens without, and except in conſequence of, much ſweating. The means for preventing it therefore are very clear and obvious; and if the method and directions at, and from, the time of delivery, and during lying-in, page 298, are properly attended to, it may always be with great certainty prevented, and need never be feared or apprehended.

With reſpect to the treatment and cure of the miliary fever when it does happen, it may be obſerved in general terms; that the ſame means which will prevent it, are alſo the likelieſt and beſt ſuited to remove and cure it. The medicines, and other medical treatment of it, cannot, with any proſpect of advantage, be here given; however, the following directions may, ſo far, be ſafely obſerved and attended to. Every means that can heat the patient muſt be cautiouſly avoided. The room muſt be made cool, by removing the fire, or ſetting open the door, and even a window if needful. The bed-curtains muſt be undrawn, and any additional quantity of bed-cloaths, if any there be, be removed; *all which muſt be done gradually*. Whatever ſhe takes

as

as food or drink, muſt be cool, and without ſpices, wine, or ſpirits of any kind. If ſhe is coſtive, a ſtool or two, and not more, muſt be procured by a glyſter, lenitive electary, infuſion of ſenna, or caſtor oil: much of a looſeneſs will be injurious.

As ſoon as, by theſe means, the heat and ſweating are checked and abated, ſhe muſt be raiſed up and ſupported in bed, and, with the aſſiſtance of a bed-chair, ſhe will perhaps be able to ſit up in bed; and which ſhe may do once, twice, or oftener in the day; obſerving, that ſhe be not too much covered up and muffled in the bed-cloaths, &c. and that ſhe has her hands and arms out of bed, which will be a means of putting an entire ſtop to the ſweating, and, of courſe, of removing the diſeaſe. She ought, as ſoon as ſhe is thought able to bear the fatigue of it, to be got out of bed once a day, which will be an effectual means of removing any remains of the complaint, and alſo of preventing a return of it. The notion that is commonly entertained of the propriety of keeping up a heat and ſweating, by way of forcing out the raſh or eruption, is very erroneous, as the heat and ſweating are the ſole cauſes of the raſh, and conſequently the removal of them muſt be the moſt ſure means of removing the complaint: and except the ſweating

ing is checked, and even entirely ſtopped (which may be done, with ſafety, by degrees), all other attempts to remove the diſorder will be vain and fruitleſs. It is well known that long continued ſweating, will, alone produce a raſh at any other time, and upon any other occaſion.

THIS complaint is juſtly dreaded, as it has often proved fatal, in this ſituation, when in the extreme; although a ſlight attack of it may be got over without danger. It was very common, when ſweating and long confinement in bed, and heat and heating things were in vogue; and is much leſs ſo ſince the cool treatment has been introduced. Thoſe of weak and delicate habits ſeem more liable to this complaint than the ſtrong and healthy.

Of diſperſing or putting back the Milk of thoſe who do not intend to give Suck.

WHEN a mother does not intend to give ſuck, it will be adviſable to make uſe of ſuch means as will prevent a flow of milk to her breaſts, or any inflammation in them. For which purpoſe, from the time of delivery, a particular abſtemiouſneſs ought to be obſerved in the diet;

which ought to conſiſt of, what may be called, the ſubſtantial, rather than the thin and diluting; as for example, the gruel may, if it can be ſo taken, be rather thick, than thin; but ſtill without wine or any thing heating in it. *Chocolate*, when it is liked, is perhaps the moſt ſuitable food, as it is not at all diſpoſed to turn to ſuck; and may be begun with immediately after delivery. Light *puddings*, and *cuſtards*, may be taken for dinner, ſo early as the ſecond or third day. *Liquids*, of all ſorts, ought to be drank as ſparingly as poſſible, although a thirſt ſhould call for them. On the third day, a ſtool may (if it be wanting) be procured, by a glyſter, lenitive electary, or caſtor oil.

Some have little or no difficulty in diſperſing or putting back their milk, while others have a great deal of trouble with it. In general, the delicate, and they who do not uſe much daily exerciſe, have the leaſt milk, and conſequently will have the leaſt trouble, oftentimes none at all, in putting it back. But the healthy, and they who have ſtrong conſtitutions; as alſo they who uſe labour, or much bodily exerciſe, are thoſe who have the greateſt flow, and who will have the moſt trouble and difficulty in diſperſing it.

The

THE breaſts need not be drawn at all, except they are uneaſy and very ſtiff; and then they may be drawn once a day, or oftener, in proportion as the ſwelling and uneaſineſs continue or increaſe.

THE benefit ſuppoſed to be obtained by plaiſters, and all other outward applications, is chiefly imaginary; and the generality of them are unpleaſing and diſagreeable.

WHEN the breaſts are much ſwelled and feel very ſtiff, a little neats-foot oil, and particularly a little gooſe greaſe, rubbed gently upon them, will ſoften them and give them eaſe.

IF, notwithſtanding theſe means, the pain and ſwelling ſtill continue, the breaſts muſt be frequently drawn, to avoid a gathering; and if a gathering ſhould really threaten, the means above-recommended upon that occaſion, page 324, muſt be ſtrictly and diligently complied with, to prevent it.

DRAWING the breaſts is commonly as much avoided upon this occaſion as can be, as it ſometimes brings a flow of milk that is not readily got quit of. Yet howſoever troubleſome that may be, it is much leſs to be apprehended and avoided than a gathered breaſt; and, therefore, it is always ſafer to draw them ſufficiently, than to run any riſque from not doing ſo at all, or but imperfectly.

WERE ladies to be governed and directed by an attention to their own immediate health, and the benefit of their conſtitutions, more than choice or faſhion, they would, when they have it in their power, give ſuck to their children. No other argument need be urged to convince them of the propriety of it, than its being the order and deſign of nature, the counteracting of which, as one of her moſt familiar and regularly intended proceſſes and operations, muſt be injurious to the conſtitution; and whenever it is done, the conſtitution receives a check and a ſhock that tends to its immediate or future diſadvantage.*

IT is not always neceſſary that a mother ſhould give ſuck for a long time; a very good and ſalutary purpoſe will be anſwered by doing it for two or three months;† which, if a hardſhip, is

* *To the Medical Reader.*——Dr. *Cullen* ſpeaks of this, as a remote cauſe of the MENORRHAGIA, "by overſtraining the extremities of the uterine veſſels:" and which muſt often be the conſequence of an unſeaſonable determination to thoſe parts.

† GIVING ſuck *one* month *only*, provided the mother is not willing or capable of doing it longer, may benefit her conſtitution: and the child in the courſe of one, two or three months may have thriven, and acquired ſo much ſtrength,

is but of ſhort duration, and of trifling import, when placed in competition with health, the greateſt bleſſing of life.

MANY and frequent are the inſtances of bad health and ſickly conſtitutions being reſtored and improved by nurſing; and as many that are occaſioned by a want of it. *Nervous* and *hyſterical* complaints are generally ſurpriſingly benefited by it.

THE trouble, that attends nurſing, is greatly magnified to an obſerver, who notices only that part of it, without being ſenſible of the infinite and ineffable delights that invariably accompany, are inſeparably connected with it.*

ſtrength, as to do very well with being weaned; but if that is not the caſe, and it does not ſeem adviſable to wean him, a wet-nurſe may be got with as much propriety then, as at his birth. Mr. *White* ſays: "If the patient does not ſuckle "her child, it is better to have her breaſts drawn, that her "milk may gradually decreaſe, than to repel it ſuddenly. "But ſhould ſhe be perſuaded to conſent, it would be better "for her to let the infant ſuck a month, than to have her "milk dried up ſooner, and this I am ſure would in no caſe "hurt even the tendereſt conſtitution." *Treatiſe on the Management of Pregnant and Lying-in Women, page* 147.

* THERE is a number (No. 246) in the *Spectator* ſolely devoted to the ſubject of mothers nurſing their own children.

SIX,

Six, or eight months, is a period as long as a mother can give ſuck conſiſtent with a proper regard to her own health; a longer time may be weakening, eſpecially to a delicate conſtitution, particularly in hot weather; and children may be weaned at that age, with great ſafety and propriety, if they are tolerably healthy and thriving. There are thoſe of ſtrong conſtitutions who will give ſuck ten months, or longer, without any apparent preſent injury to themſelves; yet, with thoſe, that is a period which ought not to be exceeded (ſee page 266): for although nurſing, for a certain length of time, benefits the conſtitution; yet it may be continued ſo long as to injure it. The extremes of not giving ſuck at all, and of continuing it too long, ought both to be avoided. There are many robuſt country women who give ſuck for two years, or longer; and which they appear to do without any preſent diſadvantage to themſelves; yet when they do it of a number of children, it undoubtedly impairs the conſtitution. This unuſual ability in nurſing is, however, chiefly confined to the rank and ſtation here named;*

as

* A COUNTRY woman, in this neighbourhood, gave ſuck to her firſt child ſixteen months; at which period, ſhe

was

as that part of the ſex whoſe exerciſes and employments are confined to what is underſtood by the polite and faſhionable amuſements of the age, together with its luxuries and indulgences, are ſo far from being capable of ſuch an exertion, that a great many are not able to nurſe at all, for want of ſuck; and others do it very imperfectly, although anxiouſly diſpoſed to do it.

NURSING very ſeldom diſagrees with the mother when ſhe has a good appetite, and plenty of ſuck: therefore, when ſhe is diſpoſed to nurſe her child, ſhe may always do it, not only with ſafety, but even to advantage to herſelf, for a few months, whatever may be the ſtate of her conſtitution, while her appetite is pretty good, and ſhe has a tolerable ſupply of milk for her child; and when theſe fail, ſhe may, and can at any time, readily wean him. A good appetite is one of the moſt favourable circumſtances that attends nurſing; and it ſeldom diſagrees when

was delivered of another child; to which, with the firſt alſo, ſhe ſuckled twenty-one months longer, and until ſhe was within three months of her time of the third. So that, ſhe gave ſuck, to one child, three years and one month: and to two children, one year and nine months of the latter part of the time; and all this without any intermiſſion, and had during the whole time (about a month at the laſt excepted), to uſe her own words, plenty of milk.

the appetite is tolerably good, although the ſuck ſhould not happen to be much in quantity.

PAINFUL and afflictive emotions of the mind ought as much as poſſible to be guarded againſt, as they not only cauſe the ſuck to diſagree with the child (page 135), but alſo leſſen its quantity; and, when exceſſive, will ſometimes take it away entirely. They are liable to be excited at this time by many cauſes; ſuch as; when the child cannot readily be brought to take the breaſt; from the child's fretfulneſs, occaſioned by indiſpoſition or any other cauſe; from the mother's very great anxiety to accompliſh her giving ſuck, &c. when from theſe, or any other cauſes, the mother gives way to grief and fretting, ſhe may expect her ſuck will be diminiſhed: it therefore behooves her, if ſhe is deſirous of preſerving her ſuck and her child's health, to endeavour, as much as poſſible, to preſerve a ſerenity and compoſure of mind, upon all occaſions. It is very common for a mother, of her firſt child, to be alarmed unneceſſarily and without cauſe at many trifles reſpecting her child; but which a little experience will enable her to diſtinguiſh, and ought, hereafter, to make her diſregard.

MUCH *ſweating*, particularly in bed, will diminiſh the ſuck; therefore every cauſe, that will promote

promote and encourage ſweating, ought to be avoided.

Some have a tolerable ſupply of milk for one, two, three, four, or more months; and then it decreaſes conſiderably, or entirely ceaſes: but, be the time longer or ſhorter, the benefit that is derived to the conſtitution from nurſing, is ſufficient always to encourage and favour a trial of it.

As nurſing may be ſaid almoſt always to agree with the mother when ſhe has plenty of milk; ſo it very rarely diſagrees with her except for want of a ſufficient quantity of ſuck: therefore if, at the beginning, ſhe has but little ſuck, or if, at any time afterward, her ſuck ſenſibly decreaſes, and if her appetite fails her, and ſhe is ſenſible of an almoſt conſtant languor, faintneſs, and univerſal weakneſs, eſpecially upon the child's drawing the breaſt, ſhe may with great certainty conclude that nurſing diſagrees with her, and that the ſooner ſhe weans her child, or gets him another breaſt, the better; as any farther attempt, on her part, will ſicken her, and reduce her ſtrength and ſpirits; and the child will be prevented from thriving, and conſequently no way benefited by it.

However, it may happen, as it very frequently does, that the mother's want of ſuck, and her indiſpoſition otherwiſe, may be occaſioned

ed by various circumſtances, as, her confinement to the houſe, and want of exerciſe in the open, pure air; a want of a proper diet, &c.: upon which occaſions, if ſhe is deſirous of nurſing, ſhe may, as her ſtrength and other circumſtances will favour it, if ſhe reſides in a town, try the effects of a country ſituation and the air and exerciſe it affords; and that, in a carriage, on horſeback, or by eaſy walking, as ſuits her inclination and convenience, and the ſeaſon of the year. It is a general, and no leſs juſt, obſervation, that the quantity of the milk is always increaſed upon the firſt motion and exerciſe within doors, and ſtill more evidently upon going out of the houſe; a clear proof of the utility and efficacy of exerciſe and air upon this occaſion, and which the country affords, and will admit of, in the greateſt perfection. It muſt be obſerved that the exerciſe be moderate, and ſuch as will not produce much fatigue of body or ſpirits.

As an attention to the diet may very much conduce to perfect this deſirable purpoſe, it muſt not be neglected. *Liquids* and *ſpoon-meats*, are to be preferred to *ſolids* or *fleſh-meats*, for general uſe; not that the latter need be avoided, at dinner particularly, when they are liked. Some articles of the diet are found to have a tendency

to

to increaſe the milk more than others. *Malt liquor*, where it agrees, and is liked, is very well ſuited to anſwer this purpoſe, and may be indulged in as freely as the inclination ſhall prompt or require, and by which the quantity ſhould always be governed; for neither that, nor any other liquor, ſhould be forced upon the ſtomach, or taken in much larger quantities than the appetite has a natural call or deſire for, as, ſo taken, it can anſwer no good purpoſe. A moderate thirſt is no unfavourable circumſtance, eſpecially when the appetite is tolerably good at the ſame time, as it directs a ſupply of what paſſes, and is converted into, milk. When malt liquor is drank, barrel porter, ſlender barrel ale, or good table beer that is not very new nor upon the turn, are preferable to bottled ale or beer, and ſuch as are ſtrong, or in the leaſt tart or windy. *Chocolate* tends more to the nouriſhment of the body than the promotion of ſuck, and therefore is not ſuited to this purpoſe. *Milk*, in its natural ſtate and as it comes from the cow, does not much promote an increaſe of ſuck; but when prepared, as in the form of poſſets with wine or ale, in whey, or as butter-milk, it aſſiſts very powerfully; perhaps nothing exceeds butter-milk and whey, for this purpoſe, when they agree. *Roots*, and *vegetables* of all kinds

kinds, that are found to agree with the ſtomach and bowels, are proper. *Fruits*, that are ripe, may be moderately taken, eſpecially the more ſweet and mellow; but thoſe that are unripe, or naturally ſour when ripe, ſhould be more carefully avoided, as they may gripe the child. It appears unneceſſary to urge the impropriety of acids, as vinegar, pickles, &c. at this time. The uſe of *ſpirituous liquors* ought to be limited; and they ſhould never be taken, except when they may be required as a medicine; as they will not increaſe the milk, may injure the ſtomach and conſtitution, and may affect the child. *Gruel*, of any kind, that is beſt liked, may be taken as often, and at ſuch times of the day, as is agreeable; and without, or with, a little quantity of wine; but gruels are ſeldom much reliſhed after lying-in. *Cold bathing*, particularly in the ſea, is ſometimes found conſiderably to increaſe the milk; and, if other means fail, may be tried: it may ſafely be begun with about the end of the ſecond month, when nothing very particular, as the ſeaſon of the year, &c. forbids it thus early.

If, after a proper compliance, as far as circumſtances will allow, with the above rules, the appetite, ſtrength, and ſpirits, are not benefited, nor the ſuck apparently increaſed; it will be the moſt

moſt adviſable to decline any farther attempts of nurſing, for the preſent. If it be of the firſt child, it ought not to be conſidered as a ſpecimen of what may be expected hereafter upon another the ſame occaſion; as it is very common to have but little milk of the firſt child; and many who have had very little of the firſt, have great plenty afterward. This want of milk of the firſt is a common reaſon for diſcouraging and declining another attempt; but which, from what is here obſerved, ought to be no obſtacle to another attempt, upon a like future occaſion. But if, on the contrary, after complying with theſe rules, the ſuck, ſtrength, and ſpirits, with a good appetite, promiſe to increaſe, the mother's happineſs will be complete; and ſhe will be enabled to perform the pleaſing duty of ſupporting her own lovely offspring, with ſatisfaction and delight to herſelf, and ſingular advantage to the ſweet innocent.

With regard to the *diet* and *exerciſe* during the remaining time of nurſing; any thing that could be farther ſaid upon them would be only a recapitulation of what is here mentioned, and has already been given, when treating of the diet and exerciſe of a wet-nurſe (page 136,) and during pregnancy, (pages 278 and 282,) to which I refer the reader, to be governed and directed by,

by, hereafter, with equal propriety and advantage. The *diet* ought, in general, to be *plain* and *ſimple*, and chiefly of the *vegetable* kind; and the *exerciſe* ought to be *frequent* and *regular*, and ſuch as can be taken with *pleaſure*, and will not *hurry* or *fatigue*.

THE END.